1	QUINN EMANUEL URQUHART & SULLIVA	N, LLP				
2 3	Alex Spiro (appearing <i>pro hac vice</i> ) alexspiro@quinnemanuel.com Andrew J. Rossman (appearing <i>pro hac vice</i> )					
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7	51 Madison Avenue, 22nd Floor New York, New York 10010					
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11	kylebatter@quinnemanuel.com 865 South Figueroa Street, 10th Floor					
12	Los Angeles, California 90017-2543					
13	Telephone: (213) 443-3000					
14	Attorneys for Defendants Tesla, Inc., Elon Musk,					
15	Brad W. Buss, Robyn Denholm, Ira Ehrenpreis,					
16	Antonio J. Gracias, James Murdoch, Kimbal Mu and Linda Johnson Rice	SK,				
17						
18	UNITED STATES DISTRICT COURT					
19	NORTHERN DISTRICT OF CALIFORNIA					
20						
21	IN RE TESLA, INC. SECURITIES LITIGATION	Case No. 3:18-cv-04865-EMC				
22		DECLARATION OF MICHAEL T.				
23		LIFRAK IN SUPPORT OF THE PARTIES' MOTIONS <i>IN LIMINE</i> AND				
24		DEFENDANTS' ARGUMENTS IN SUPPORT OF THEIR PROPOSED JURY				
25		INSTRUCTIONS				
26						
27						
28						

Case No. 3:18-cv-04865-EMC

LIFRAK DECLARATION IN SUPPORT OF MOTIONS IN LIMINE

#### DECLARATION OF MICHAEL T. LIFRAK

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I, MICHAEL T. LIFRAK, declare as follows:

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- I am a partner at the law firm Quinn Emanuel Urquhart & Sullivan, LLP, counsel for Defendants Tesla, Inc., Elon Musk, Brad W. Buss, Robyn Denholm, Ira Ehrenpreis, Antonio J. Gracias, James Murdoch, Kimbal Musk, and Linda Johnson Rice in this action. I make this declaration in support of the parties' motions in limine and oppositions thereto, and in support of Defendants' arguments for their proposed jury instructions. I know the facts stated herein of my own personal knowledge and, if called as a witness, I could and would testify competently thereto.
- The lettered exhibits that follow are exhibits cited in the parties' motions in limine and oppositions thereto, as well as in Defendants' arguments in support of their proposed jury instructions. These exhibits have not previously been marked as exhibits during depositions in this matter.
- 3. Attached hereto as **Exhibit A** is a true and correct copy of the settlement entered into between Elon Musk and the United States Securities and Exchange Commission, dated August 29, 2018, and filed at Dkt. 6-1 in Case No. 1:18-cv-08865 (S.D.N.Y.).
- 4. Attached hereto as **Exhibit B** is a true and correct copy of the settlement entered into between Tesla, Inc. and the United States Securities and Exchange Commission, dated August 29, 2018, and filed at Dkt. 3-1 in Case No. 1:18-cv-08947 (S.D.N.Y.).
- 5. Attached hereto as **Exhibit C** is a true and correct copy of excerpts from the transcript of the March 16, 2022 deposition of Steven Heston.
- 6. Attached hereto as **Exhibit D** is a true and correct copy of table created at the direction of Professor Amit Seru showing cases where Dr. Hartzmark's calculation of inflation for a Tesla option traded during the class period exceeds the option's mid-price.
- 7. Attached hereto as **Exhibit E** is a true and correct copy of Professor Amit Seru's calculation of the number of Professor Heston's predictions inside and outside of the bid-ask bounds presented in Figures 1 through 4 of the Supplemental Expert Report of Steven L. Heston, Ph.D., dated March 5, 2022.
- 8. Attached hereto as **Exhibit F** is a print-out of a research note from the website of Fideres, the consulting firm that aided Professor Heston in this case.

- 9. Attached hereto as **Exhibit G** is a true and correct copy of excerpts from the transcript of the March 18, 2022 deposition of Michael Hartzmark.
- 10. Attached hereto as **Exhibit H** is a true and correct copy of excerpts from the transcript of the March 28, 2022 deposition of Daniel Fischel.
- 11. Attached hereto as **Exhibit I** is a true and correct copy of the transcript of the June 16, 2022 hearing on Defendants' Motions for Reconsideration and for a Certification for Interlocutory Appeal.
- 12. Attached hereto as **Exhibit J** is a true and correct copy of excerpts from the transcript of the August 11, 2021 deposition of Sam Teller.
- 13. Attached hereto as **Exhibit K** is a true and correct copy of excerpts from the transcript of the October 5, 2021 deposition of Robyn Denholm.
- 14. Attached hereto as **Exhibit L** is a true and correct copy of excerpts from the transcript of the March 31, 2022 deposition of Plaintiff Glen Littleton.
- 15. Attached hereto as **Exhibit M** is a true and correct copy of excerpts of the Jury Instructions in the matter of *Hsingching Hsu v. Puma Biotechnology, Inc.*, *et al.*, Case No. 8:15-cv-00865-AG-SHK, Dkt. 700 (C.D. Cal. Jan. 29, 2019).
- 16. Attached hereto as **Exhibit N** is a true and correct copy of excerpts of the Jury Instructions in the matter of *In Re JDS Uniphase Corp. Securities Litigation*, Case No. C 02-1486, Dkt. 1874 (N.D. Cal. Nov. 19, 2007).
- 17. Attached hereto as **Exhibit O** is a true and correct copy of excerpts from the June 21, 2012 trial transcript in the matter of *Liberty Media Corp. et al. v. Vivendi Universal S.A., et al.*, Case No. 03 CV 2175 (SAS), Dkt. 305 (S.D.N.Y. Aug. 10, 2012).
- 18. Attached hereto as **Exhibit P** is a true and correct copy of excerpts of the Charge to the Jury in the matter of *In re Vivendi Universal, S.A. Securities Litigation*, Case No. 02 Civ 5571 (RJH) (HBP), Dkt. 1052-2 (S.D.N.Y. May 13, 2010).
- 19. Attached hereto as **Exhibit Q** is a true and correct copy of excerpts from the transcript of the March 28, 2022 deposition of Daniel Fischel.
- 20. Attached hereto as **Exhibit R** is a true and correct copy of the Court's Order on Plaintiff's Motion for Partial Summary Judgment, dated April 1, 2022, and filed at Dkt. 387.

- 21. Attached hereto as **Exhibit S** is a true and correct copy of Defendants' Opposition to Plaintiff's Motion for Partial Summary Judgment, dated February 1, 2022, and filed with redactions at Dkt. 436.
- 22. Attached hereto as **Exhibit T** is a true and correct copy of excerpts from the transcript of the November 5, 2021 deposition of Elon Musk.
- 23. Attached hereto as **Exhibit U** is a true and correct copy of the Declaration Of Elon Musk In Support Of His Motion To Quash & To Terminate Consent Decree in the matter of *SEC v. Musk*, Case No. 1:18-cv-08865-AJN, Dkt. 72 (S.D.N.Y. March 8, 2022).
- 24. Attached hereto as **Exhibit V** are excerpts from an Elon Musk TED Talk, which Plaintiff previously filed at Dkt. 395-7.
- 25. Attached hereto as **Exhibit W** is a true and correct copy of Defendants' trial witness list as of September 2, 2022.
- 26. Attached hereto as **Exhibit X** is a true and correct copy of excerpts from the transcript of the August 11, 2021 deposition of Sam Teller.
- 27. Attached hereto as **Exhibit Y** is a true and correct copy of excerpts from the transcript of the October 5, 2021 deposition of Robyn Denholm.
- 28. Attached hereto as **Exhibit Z** is a true and correct copy of excerpts from the transcript of the August 25, 2021 deposition of Ira Ehrenpreis.
- 29. Attached hereto as **Exhibit AA** is a true and correct copy of excerpts from the transcript of the August 17, 2021 Deposition of James Murdoch.
- 30. Attached hereto as **Exhibit BB** is a true and correct copy of excerpts from the transcript of the October 26, 2021 deposition of Antonio Gracias.
- 31. Attached hereto as **Exhibit CC** is a true and correct copy of excerpts from the transcript of the September 29, 2021 deposition of Bradley Buss.
- 32. Attached hereto as **Exhibit DD** is a screenshot of a tweet by Elon Musk, dated November 6, 2021.
- 33. Attached hereto as **Exhibit EE** is a true and correct copy of excerpts from the transcript of the March 31, 2022 deposition of Plaintiff Glen Littleton.

Complaint for Violations of the Federal Securities Laws, dated January 16, 2019, and filed at Dkt. 184.

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of the March 16, 2022 deposition of Steven Heston.

Attached hereto as **Exhibit FF** is a screenshot of a tweet by Elon Musk, dated October 4,

Attached hereto as Exhibit GG is a true and correct copy of Plaintiff's Consolidated

Attached hereto as **Exhibit HH** is a true and correct copy of excerpts from the transcript

7	37.	Attached hereto as <b>Exhibit II</b> are excerpts from Tesla, Inc.'s December 31, 2021 Form 10-
8	K.	
9	38.	Attached hereto as <b>Exhibit JJ</b> is a true and correct copy of excerpts from the March 22,
10	2022 deposit	tion of Amit Seru.
11	39.	Attached hereto as $\underline{\textbf{Exhibit KK}}$ is a true and correct copy of excerpts from the transcript
12	of the March	18, 2022 deposition of Michael Hartzmark
13		* * *
14	40.	The numbered exhibits that follow are exhibits previously marked during depositions in
15	this matter th	nat are cited in the parties' motions in limine and in Defendants' arguments in support of their
16	proposed jur	y instructions.
17	41.	Attached hereto as <b>Exhibit 368</b> is a true and correct copy of the Expert Report of Steven
18	L. Heston, d	ated November 8, 2021.
19	42.	Attached hereto as <b>Exhibit 369</b> is a true and correct copy of the Supplemental Expert
20	Report of Sto	even L. Heston, dated March 5, 2022.
21	43.	Attached hereto as <b>Exhibit 370</b> is a true and correct copy of the Expert Rebuttal Report of
22	Professor Ar	mit Seru, dated December 8, 2021.
23	44.	Attached hereto as <b>Exhibit 375</b> is a true and correct copy of the Expert Damages Report
24	of Michael L	. Hartzmark, dated November 10, 2021.
25	45.	Attached hereto as <b>Exhibit 378</b> is a true and correct copy of the Expert Report of Daniel
26	R. Fischel, d	ated November 8, 2021.
27	46.	Attached hereto as <b>Exhibit 423</b> is a true and correct copy of the Rebuttal Expert Report of
28	Daniel R. Fis	schel, dated December 8, 2021.
		-4- Case No. 3:18-cv-04865-EM6
		LIFRAK DECLARATION IN SUPPORT OF MOTIONS IN LIMINA

I declare under penalty of perjury of the laws of the State of California that the foregoing is true and correct. Executed this 20th day of September 2022. /s/ Michael T. Lifrak Michael T. Lifrak 

**CERTIFICATE OF SERVICE** I hereby certify that the foregoing document was served on all counsel of record electronically or by another manner authorized under FED. R. CIV. P. 5(b) on this the 20th day of September 2022. /s/ Michael T. Lifrak Michael T. Lifrak 

# EXHIBIT A

## UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

UNITED STATES SECURITIES AND :
EXCHANGE COMMISSION :

Plaintiff,

vs. : No. 1:18-cv-8865-AJN-GWG

ELON MUSK,

Defendant.

\_\_\_\_

#### **CONSENT OF DEFENDANT ELON MUSK**

- 1. Defendant Elon Musk ("Defendant") waives service of a summons and the complaint in this action, enters a general appearance, and admits the Court's jurisdiction over Defendant in this action only and over the subject matter of this action.
- 2. Without admitting or denying the allegations of the complaint (except as provided herein in paragraph 13 and except as to personal jurisdiction as to this matter only and subject matter jurisdiction, which Defendant admits), Defendant hereby consents to the entry of the final Judgment in the form attached hereto (the "Final Judgment") and incorporated by reference herein, which, among other things:
  - (a) permanently restrains and enjoins Defendant from violation of Section 10(b) of the Securities Exchange Act of 1934 (the "Exchange Act") [15 U.S.C. § 78j(b)] and Rule 10b-5 thereunder [17 C.F.R. § 240.10b-5];
  - (b) orders Defendant to pay a civil penalty in the amount of \$20,000,000 under Section 21(d)(3) of the Exchange Act [15 U.S.C. § 78u(d)(3)]; and
  - requires Defendant to comply with the undertaking set forth in thisConsent and incorporated in the Final Judgment.
  - 3. Defendant acknowledges that the civil penalty paid pursuant to the Final

Judgment may be distributed pursuant to the Fair Fund provisions of Section 308(a) of the Sarbanes-Oxley Act of 2002, as amended. Regardless of whether any such Fair Fund distribution is made, the civil penalty shall be treated as a penalty paid to the government for all purposes, including all tax purposes. To preserve the deterrent effect of the civil penalty argue that he is entitled to, nor shall he further benefit by, offset or reduction of any award of compensatory damages in any Related Investor Action by the amount of any part of Defendant's payment of a civil penalty in this action ("Penalty Offset"). If the court in any Related Investor Action grants such a Penalty Offset, Defendant agrees that he shall, within 30 days after entry of a final order granting the Penalty Offset, notify the Commission's counsel in this action and pay the amount of the Penalty Offset to the United States Treasury or to a Fair Fund, as the Commission directs. Such a payment shall not be deemed an additional civil penalty and shall not be deemed to change the amount of the civil penalty imposed in this action. For purposes of this paragraph, a "Related Investor Action" means a private damages action brought against Defendant by or on behalf of one or more investors based on substantially the same facts as alleged in the Complaint in this action.

- 4. Defendant agrees that he shall not seek or accept, directly or indirectly, reimbursement or indemnification from any source, including but not limited to payment made pursuant to any insurance policy, with regard to any civil penalty amounts that Defendant pays pursuant to the Final Judgment, regardless of whether such penalty amounts or any part thereof are added to a distribution fund or otherwise used for the benefit of investors. Defendant further agrees that he shall not claim, assert, or apply for a tax deduction or tax credit with regard to any federal, state, or local tax for any penalty amounts that Defendant pays pursuant to the Final Judgment, regardless of whether such penalty amounts or any part thereof are added to a distribution fund or otherwise used for the benefit of investors.
  - 5. Defendant undertakes to:
    - (a) resign from his role as Chairman of the Board of Directors of Tesla, Inc.("Chairman") within forty-five (45) days of the filing of this Consent and

- agree not to seek reelection or to accept an appointment as Chairman for a period of three years thereafter. Upon request by Defendant, the Commission staff may grant in its sole discretion an extension to the deadline set forth above;
- (b) comply with all mandatory procedures implemented by Tesla, Inc. (the "Company") regarding (i) the oversight of communications relating to the Company made in any format, including, but not limited to, posts on social media (*e.g.*, Twitter), the Company's website (*e.g.*, the Company's blog), press releases, and investor calls, and (ii) the pre-approval of any such written communications that contain, or reasonably could contain, information material to the Company or its shareholders; and
- (c) certify, in writing, compliance with undertaking (a) set forth above. The certification shall identify the undertaking, provide written evidence of compliance in the form of a narrative, and be supported by exhibits sufficient to demonstrate compliance. The Commission staff may make reasonable requests for further evidence of compliance, and Defendant agrees to provide such evidence. Defendant shall submit the certification and supporting material to Steven Buchholz, Assistant Regional Director, U.S. Securities and Exchange Commission, 44 Montgomery Street, 28th Floor, San Francisco, CA 94104, with a copy to the Office of Chief Counsel of the Enforcement Division, 100 F Street NE, Washington, DC 20549, no later than fourteen (14) days from the date of the completion of the undertaking.
- 6. Defendant waives the entry of findings of fact and conclusions of law pursuant to Rule 52 of the Federal Rules of Civil Procedure.
- 7. Defendant waives the right, if any, to a jury trial and to appeal from the entry of the Final Judgment.

- 8. Defendant enters into this Consent voluntarily and represents that no threats, offers, promises, or inducements of any kind have been made by the Commission or any member, officer, employee, agent, or representative of the Commission to induce Defendant to enter into this Consent.
- 9. Defendant agrees that this Consent shall be incorporated into the Final Judgment with the same force and effect as if fully set forth therein.
- 10. Defendant will not oppose the enforcement of the Final Judgment on the ground, if any exists, of lack of compliance with Rule 65(d) of the Federal Rules of Civil Procedure, and hereby waives any objection based thereon.
- 11. Defendant waives service of the Final Judgment and agrees that entry of the Final Judgment by the Court and filing with the Clerk of the Court will constitute notice to Defendant of its terms and conditions. Defendant further agrees to provide counsel for the Commission, within thirty days after the Final Judgment is filed with the Clerk of the Court, with an affidavit or declaration stating that Defendant has received and read a copy of the Final Judgment.
- asserted against Defendant in this civil proceeding. Defendant acknowledges that no promise or representation has been made by the Commission or any member, officer, employee, agent, or representative of the Commission with regard to any criminal liability that may have arisen or may arise from the facts underlying this action or immunity from any such criminal liability. Defendant waives any claim of Double Jeopardy based upon the settlement of this proceeding, including the imposition of any remedy or civil penalty herein. Defendant further acknowledges that the Court's entry of a permanent injunction may have collateral consequences under federal or state law and the rules and regulations of self-regulatory organizations, licensing boards, and other regulatory organizations. Such collateral consequences include, but are not limited to, a statutory disqualification with respect to membership or participation in, or association with a member of, a self-regulatory organization. This statutory disqualification has consequences that are separate from any sanction imposed in an administrative proceeding. In addition, in any

disciplinary proceeding before the Commission based on the entry of the injunction in this action, Defendant understands that he shall not be permitted to contest the factual allegations of the complaint in this action.

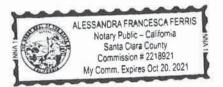
13. Defendant understands and agrees to comply with the terms of 17 C.F.R. § 202.5(e), which provides in part that it is the Commission's policy "not to permit a defendant or respondent to consent to a judgment or order that imposes a sanction while denying the allegations in the complaint or order for proceedings," and "a refusal to admit the allegations is equivalent to a denial, unless the defendant or respondent states that he neither admits nor denies the allegations." As part of Defendant's agreement to comply with the terms of Section 202.5(e), Defendant: (i) will not take any action or make or permit to be made any public statement denying, directly or indirectly, any allegation in the complaint or creating the impression that the complaint is without factual basis; (ii) will not make or permit to be made any public statement to the effect that Defendant does not admit the allegations of the complaint, or that this Consent contains no admission of the allegations, without also stating that Defendant does not deny the allegations; (iii) upon the filing of this Consent, Defendant hereby withdraws any papers filed in this action to the extent that they deny any allegation in the complaint; and (iv) stipulates solely for purposes of exceptions to discharge set forth in Section 523 of the Bankruptcy Code [11] U.S.C. § 5231 that the allegations in the complaint are true, and further, that any debt for disgorgement, prejudgment interest, civil penalty or other amounts due by Defendant under the Final Judgment or any other judgment, order, consent order, decree or settlement agreement entered in connection with this proceeding, is a debt for the violation by Defendant of the federal securities laws or any regulation or order issued under such laws, as set forth in Section 523(a)(19) of the Bankruptcy Code [11 U.S.C. § 523(a)(19)]. If Defendant breaches this agreement, the Commission may petition the Court to vacate the Final Judgment and restore this action to its active docket. Nothing in this paragraph affects Defendant's: (i) testimonial obligations; or (ii) right to take legal or factual positions in litigation or other legal proceedings in which the Commission is not a party.

- 14. Defendant hereby waives any rights under the Equal Access to Justice Act, the Small Business Regulatory Enforcement Fairness Act of 1996, or any other provision of law to seek from the United States, or any agency, or any official of the United States acting in his or her official capacity, directly or indirectly, reimbursement of attorney's fees or other fees, expenses, or costs expended by Defendant to defend against this action. For these purposes, Defendant agrees that Defendant is not the prevailing party in this action since the parties have reached a good faith settlement.
- 15. Defendant agrees that the Commission may present the Final Judgment to the Court for signature and entry without further notice.
- 16. Defendant agrees that this Court shall retain jurisdiction over this matter for the purpose of enforcing the terms of the Final Judgment.

Dated: Stotember 28, 2018

Elon Musk

on 38, Elon Musk, a person known to me, personally appeared before me and acknowledged executing the foregoing Consent.



Notary Public

Commission expires:

Approved as to form:

Steven M. Farina

Williams & Connolly LLP

725 Twelfth Street N.W.

Washington, DC 20005

Attorney for Defendant

#### **CALIFORNIA JURAT**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA	)
	) ss
COUNTY OF ALAMEDA	)

Subscribed and sworn to (or affirmed) before me on this 28th day of September 2018, by **Elon Musk**, proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

(Seal)

WITNESS my hand and official seal.

ALESSANDRA FRANCESCA FERRIS
Notary Public – California
Santa Clara County
Commission # 2218921
My Comm. Expires Oct 20, 2021

Notary Public

State of California

# **EXHIBIT B**

## UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

UNITED STATES SECURITIES AND
EXCHANGE COMMISSION

Plaintiff,
vs.
No.
TESLA, INC.,

Defendant.

### CONSENT OF DEFENDANT TESLA, INC.

- 1. Defendant Tesla, Inc. ("Defendant" or "Company") waives service of a summons and the complaint in this action, enters a general appearance, and admits the Court's jurisdiction over Defendant in this action only and over the subject matter of this action.
- 2. Without admitting or denying the allegations of the complaint (except as provided herein in paragraph 14 and except as to personal jurisdiction as to this matter only and subject matter jurisdiction, which Defendant admits), Defendant hereby consents to the entry of the final Judgment in the form attached hereto (the "Final Judgment") and incorporated by reference herein, which, among other things:
  - (a) permanently restrains and enjoins Defendant from violation of Rule 13a-15 of the Securities Exchange Act of 1934 (the "Exchange Act") [17 C.F.R. § 240.13a-15];
  - (b) orders Defendant to pay a civil penalty in the amount of \$20,000,000 under Section 21(d)(3) of the Exchange Act [15 U.S.C. § 78u(d)(3)]; and
  - requires Defendant to comply with the undertakings set forth in thisConsent and incorporated in the Final Judgment.
  - 3. Defendant acknowledges that the civil penalty paid pursuant to the Final

Judgment may be distributed pursuant to the Fair Fund provisions of Section 308(a) of the Sarbanes-Oxley Act of 2002, as amended. Regardless of whether any such Fair Fund distribution is made, the civil penalty shall be treated as a penalty paid to the government for all purposes, including all tax purposes. To preserve the deterrent effect of the civil penalty, Defendant agrees that it shall not, after offset or reduction of any award of compensatory damages in any Related Investor Action based on Defendant's payment of disgorgement in this action, argue that it is entitled to, nor shall it further benefit by, offset or reduction of such compensatory damages award by the amount of any part of Defendant's payment of a civil penalty in this action ("Penalty Offset"). If the court in any Related Investor Action grants such a Penalty Offset, Defendant agrees that it shall, within 30 days after entry of a final order granting the Penalty Offset, notify the Commission's counsel in this action and pay the amount of the Penalty Offset to the United States Treasury or to a Fair Fund, as the Commission directs. Such a payment shall not be deemed an additional civil penalty and shall not be deemed to change the amount of the civil penalty imposed in this action. For purposes of this paragraph, a "Related Investor Action" means a private damages action brought against Defendant by or on behalf of one or more investors based on substantially the same facts as alleged in the Complaint in this action.

- 4. Defendant agrees that it shall not seek or accept, directly or indirectly, reimbursement or indemnification from any source, including but not limited to payment made pursuant to any insurance policy, with regard to any civil penalty amounts that Defendant pays pursuant to the Final Judgment, regardless of whether such penalty amounts or any part thereof are added to a distribution fund or otherwise used for the benefit of investors. Defendant further agrees that it shall not claim, assert, or apply for a tax deduction or tax credit with regard to any federal, state, or local tax for any penalty amounts that Defendant pays pursuant to the Final Judgment, regardless of whether such penalty amounts or any part thereof are added to a distribution fund or otherwise used for the benefit of investors.
  - 5. Within forty-five (45) days of the filing of this Consent, Defendant undertakes to

appoint an independent Chairman of the Company's Board of Directors ("Chairman") to replace Elon Musk, and agree not to reappoint Elon Musk to Chairman for a minimum of three years and unless such reappointment is approved by a majority vote of shareholders at such time. Upon request by the Company, the Commission staff may grant in its sole discretion an extension to the deadline set forth above.

- 6. Within ninety (90) days of the filing of this Consent, Defendant undertakes to:
  - (a) add two independent directors to the Company's Board of Directors (one of which may be the independent Chairman if that person is appointed from outside the Company, its affiliates, and the affiliates of Elon Musk). Upon request by the Company, the Commission staff may grant in its sole discretion an extension to the deadline set forth above;
  - (b) create a permanent committee ("Committee") of the Company's Board of Directors, consisting of independent directors only, overseeing the (i) implementation of the terms of this Consent and incorporated Final Judgment; (ii) controls and processes governing the Company's and its senior executives' disclosures and/or public statements that relate to the Company; and (iii) review and resolution of human resources issues or issues raising conflicts of interest that involve any member of executive management. The charter and composition of the Committee is subject to review and approval by the staff of the Commission;
  - (c) employ or designate an experienced securities lawyer ("Securities

    Counsel") whose qualifications are not unacceptable to the staff and

    maintain such counsel (or a successor Securities Counsel) for so long as
    the Company remains a reporting company under the Securities Exchange

    Act of 1934. The Securities Counsel will review communications made
    through Twitter and other social media by the Company's senior officers
    in a manner that is consistent with the Company's disclosure policy and

- procedures, including the procedures and controls referenced in subsection (d) below, as well as advise the Company on securities issues, including, but not limited to, compliance with all federal securities laws and regulations;
- (d) implement mandatory procedures and controls to oversee all of Elon Musk's communications regarding the Company made in any format, including, but not limited to, posts on social media (e.g., Twitter), the Company's website (e.g., the Company's blog), press releases, and investor calls, and to pre-approve any such written communications that contain, or reasonably could contain, information material to the Company or its shareholders. The definition of, and the process to determine, which of Elon Musk's communications contain, or reasonably could contain, information material to the Company or its shareholders shall be set forth in the Company's disclosure policies and procedures; and
- (e) certify, in writing, compliance with the undertakings set forth above in paragraphs 5 and 6. The certification shall identify the undertakings, provide written evidence of compliance in the form of a narrative, and be supported by exhibits sufficient to demonstrate compliance. The Commission staff may make reasonable requests for further evidence of compliance, and Defendant agrees to provide such evidence within a reasonable amount of time. Defendant shall submit the certification and supporting material to Steven Buchholz, Assistant Regional Director, U.S. Securities and Exchange Commission, 44 Montgomery Street, 28th Floor, San Francisco, CA 94104, with a copy to the Office of Chief Counsel of the Enforcement Division, 100 F Street NE, Washington, DC 20549, no later than fourteen (14) days from the date of the completion of the undertakings.

- 7. Defendant waives the entry of findings of fact and conclusions of law pursuant to Rule 52 of the Federal Rules of Civil Procedure.
- 8. Defendant waives the right, if any, to a jury trial and to appeal from the entry of the Final Judgment.
- 9. Defendant enters into this Consent voluntarily and represents that no threats, offers, promises, or inducements of any kind have been made by the Commission or any member, officer, employee, agent, or representative of the Commission to induce Defendant to enter into this Consent.
- 10. Defendant agrees that this Consent shall be incorporated into the Final Judgment with the same force and effect as if fully set forth therein.
- 11. Defendant will not oppose the enforcement of the Final Judgment on the ground, if any exists, that it fails to comply with Rule 65(d) of the Federal Rules of Civil Procedure, and hereby waives any objection based thereon.
- 12. Defendant waives service of the Final Judgment and agrees that entry of the Final Judgment by the Court and filing with the Clerk of the Court will constitute notice to Defendant of its terms and conditions. Defendant further agrees to provide counsel for the Commission, within thirty days after the Final Judgment is filed with the Clerk of the Court, with an affidavit or declaration stating that Defendant has received and read a copy of the Final Judgment.
- asserted against Defendant in this civil proceeding. Defendant acknowledges that no promise or representation has been made by the Commission or any member, officer, employee, agent, or representative of the Commission with regard to any criminal liability that may have arisen or may arise from the facts underlying this action or immunity from any such criminal liability. Defendant waives any claim of Double Jeopardy based upon the settlement of this proceeding, including the imposition of any remedy or civil penalty herein. Defendant further acknowledges that the Court's entry of a permanent injunction may have collateral consequences under federal or state law and the rules and regulations of self-regulatory organizations, licensing boards, and

other regulatory organizations. Such collateral consequences include, but are not limited to, a statutory disqualification with respect to membership or participation in, or association with a member of, a self-regulatory organization. This statutory disqualification has consequences that are separate from any sanction imposed in an administrative proceeding. In addition, in any disciplinary proceeding before the Commission based on the entry of the injunction in this action, Defendant understands that it shall not be permitted to contest the factual allegations of the complaint in this action.

- Defendant understands and agrees to comply with the terms of 17 C.F.R. § 14. 202.5(e), which provides in part that it is the Commission's policy "not to permit a defendant or respondent to consent to a judgment or order that imposes a sanction while denying the allegations in the complaint or order for proceedings," and "a refusal to admit the allegations is equivalent to a denial, unless the defendant or respondent states that it neither admits nor denies the allegations." As part of Defendant's agreement to comply with the terms of Section 202.5(e), Defendant: (i) will not take any action or make or permit to be made any public statement denying, directly or indirectly, any allegation in the complaint or creating the impression that the complaint is without factual basis; (ii) will not make or permit to be made any public statement to the effect that Defendant does not admit the allegations of the complaint, or that this Consent contains no admission of the allegations, without also stating that Defendant does not deny the allegations; and (iii) upon the filing of this Consent, Defendant hereby withdraws any papers filed in this action to the extent that they deny any allegation in the complaint. If Defendant breaches this agreement, the Commission may petition the Court to vacate the Final Judgment and restore this action to its active docket. Nothing in this paragraph affects Defendant's: (i) testimonial obligations; or (ii) right to take legal or factual positions in litigation or other legal proceedings in which the Commission is not a party.
- 15. Defendant hereby waives any rights under the Equal Access to Justice Act, the Small Business Regulatory Enforcement Fairness Act of 1996, or any other provision of law to seek from the United States, or any agency, or any official of the United States acting in his or

her official capacity, directly or indirectly, reimbursement of attorney's fees or other fees, expenses, or costs expended by Defendant to defend against this action. For these purposes. Defendant agrees that Defendant is not the prevailing party in this action since the parties have reached a good faith settlement.

- 16. Defendant agrees that the Commission may present the Final Judgment to the Court for signature and entry without further notice.
- 17. Defendant agrees that this Court shall retain jurisdiction over this matter for the purpose of enforcing the terms of the Final Judgment.

Dated:	_Se	Pter	nbei	<u> 29</u>	2018
		2			

Tesla, Inc.

General Counsel

Tesla, Inc.

3500 Deer Creek Road Palo Alto, CA 94304

MAYON, a person known to me, personally appeared before me and acknowledged executing the foregoing Consent with full authority to do so on behalf of Inc. as its pareval (inuse

STEPHANIE ROBIN CASTRO VARGO Notary Public - California Alameda County **Commission # 2169444** My Comm. Expires Oct 24, 2020

Approved as to form:

Cahill Gordon & Reindel LLP

1990 K Street, N.W.

Suite 950

Washington, D.C. 20006

Attorney for Defendant

### CALIFORNIA JURAT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA	)	
	)	SS
COUNTY OF SAN MATEO	)	

Subscribed and sworn to (or affirmed) before me on this 29th day of September 2018, by **Todd Maron**, proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

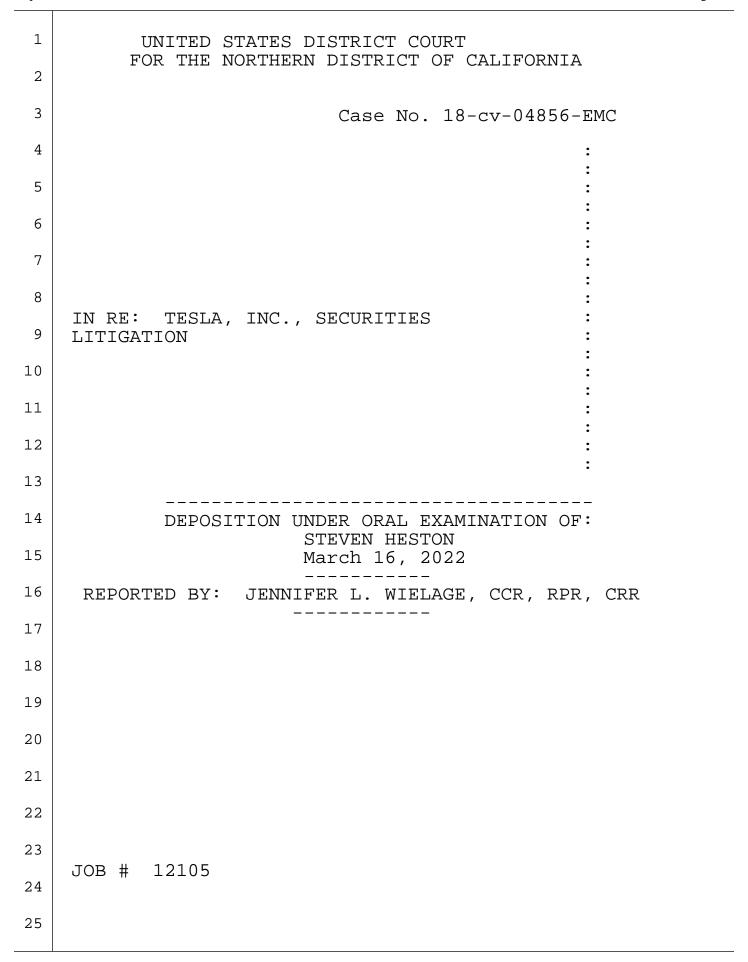
STEPHANIE ROBIN CASTRO VARGO
Notary Public - California
Alameda County
Commission # 2169444
My Comm. Expires Oct 24, 2020

WITNESS my hand and official seal.

\_(Seal)

Notary Public \
State of California

# **EXHIBIT C**



1 could apply the event study methodology to different 2 markets with different sorts of announcements. 3 So could one perform an event study 0. 4 on options? 5 One could. A. 6 And do you have the expertise to be 0. 7 able to perform an event study on options? 8 Α. Yes, I think so. 9 Were you asked to do that in this 0. 10 case? 11 No, I was not asked to do an event A. 12 study. 13 0. Okav. Now, could we take a look at 14 your opening report, which is Exhibit 368? 15 I think that's the one that's on the 16 screen, at page 5, please? 17 And if you scroll down so we can see 18 all of Paragraph 10, please, focus your attention on 19 that. 20 Α. Yes. 21 And Paragraph 10 describes, I believe Ο. 22 in summary form, what you've been retained to do? 23 Α. Yes. 24 Could you explain to me, in layman's Ο. 25 terms, what it was that you were retained to do?

1 Let me find this here. Α. What page, 2 please? 3 55. So you write in Paragraph 163: 0. 4 In general, there are two ways to calculate the 5 impact on traded options. One possibility is to 6 calculate a unique but-for price and then compare 7 that to the transacted price. 8 Yes. Α. 9 And the other is to calculate Ο. Okav. 10 an impact quantum. I'll just pause there for a 11 second. Okay? 12 You did not calculate a unique 13 but-for price and then compare it to transacted 14 prices, correct? 15 I did not opine that. Of course I Α. 16 did various calculations in the course of developing 17 my methodology, and I -- but I did not conclude that 18 that was the best approach. So I favored the second 19 approach. 20 So the approach that you used of 0. 21 calculating an impact quantum was not comparing -- am 22 I correct, sir, it was not comparing actual 23 transacted prices to theoretical but-for prices? 24 A. That's correct. 25 So your analysis, using an Q. Okay.

23

24

25

- 1 impact quantum -- to create your impact quantum, you 2 actually are not using actual transacted prices as a 3 comparator at all? 4 I am not doing it in -- in the Α. I am. 5 manner that Seru did. I am using actual bid-ask 6 quotes on at-the-money or at-the-money forward 7 options to come up with a less noisy measure and 8 measure the consequences for the change in value as 9 opposed to using each option individually. 10 Ο. Okay. So maybe it's a better way to 11 think about it. There are approximately 2400 12 discreet options referencing Tesla stock that were 13 traded during the Class Period; is that right? 14 That sounds about right. Α. 15 You didn't use transacted Ο. Okav. 16 prices in any of those as part of your development of 17 an impact quantum, right? 18 I did not use the actual transacted Α. 19 prices in all of them. I used the more liquid 20 at-the-money bid-ask quotes. 21 0. And not for put or call options, but
  - and a call option.

for an at-the-money straddle?

Α.

Q. This was a constructed straddle, a

A straddle is, by definition, a put

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1

theoretical straddle or an actual traded straddle?

- This -- in order to be meticulous, I Α. interpolated the actual bid-ask quotes for both puts and calls just above and just below the money to take a weighted average that was exactly at-the-money and thereby, I averaged the guotes of all those options.
- So I suppose I'm asking you a fairly 0. mechanical question: Are you familiar with trading in something that's actually referred to as a straddle, single trade that's referred to as a straddle, or are you familiar with people only trading individual puts and calls that they may combine in order to form an effective straddle?
- One can try to trade option spreads Α. or combinations, but the data we have is on puts and calls individually and a straddle is, by definition, buying a put and a call, and so I used the sum or, if you will, the average of the put and call price to determine the straddle value.
- 0. And to the extent that you used those actual transacted prices at all --
  - Α. T --
- Sorry, please. Ο.
- Α. Minor clarification. I was using quotes, not -- not actual executed prices. I was

```
1
     using bid-ask quotes.
 2
             0.
                     And when you refer -- we'll get --
 3
     perhaps get into more specifics on this.
 4
                     But when you were using quotes with
5
     respect to at-the-money puts and calls, were you
 6
     using bid side, ask side or something else?
7
            Α.
                     I used the average.
8
                     So that's what you referred to as the
             0.
9
     mid?
10
            Α.
                     Referred to as what, please?
11
                     As the mid.
             0.
12
                     Yes, the mid.
             Α.
13
                     Mid-price or mid-market?
             Ο.
14
            Α.
                     Yes.
15
                            And did that reference -- you
             Ο.
                     Okav.
16
     drew a distinction between quotes and executed
17
     prices?
18
             Α.
                     Yes, that's right.
19
                     So at the time that -- for the
             0.
20
     relevant time for which you were using quotes, you
21
     would expect that executed prices in the market would
22
     actually differ from the derived mid-market quotes
23
     that you used?
24
             Α.
                     For which options do you mean?
25
                     So for focusing on the at-the-money
             Q.
```

puts and calls that you used to construct an at-the-money straddle.

- A. Yes, for those I would expect the transact -- the actual transacted prices to be very close to the -- or inside the bid-ask spread, and that's why I used those options, because they are the most reliable indicators of volatility. I have some citations to give you on that.
- Q. Well, my question is a precise one.

  It's that you would expect that the executed prices, transacted prices, in the market at the same time as the relevant quotes that you were using would differ because your quotes were a mid-market or the middle between the bid and the ask, right?
- A. Well, when you say "differ," they need not be exactly the same and there's an issue of even observing them at exactly the same time, but I would expect for the liquid at-the-money options, I would expect the transactions to be inside the bid-ask spread and the midpoint, by definition, is halfway between the bid and ask in the spread.
- Q. Well, generally speaking, market participants don't trade at the mid. They trade at the bid or the ask, right?
  - A. No. There are limit orders, and you

1 consistently across all options and then we can 2 uniform consist -- uniformly, consistently and 3 reliably calculate the price changes in a coherent 4 way for all these options. 5 Ο. Okay. So you didn't have transacted 6 prices that you could actually rely on to establish 7 the starting point in your analysis of the 8 at-the-money straddle, which is where crossed at one 9 minute before 12:48, right? 10 I had the bid and ask quotes and I Α. 11 used the average or midpoint. 12 So the answer to my question is you 0. 13 didn't have actual transacted prices you can look at 14 for that starting point, right? 15 That's correct. A. 16 I'm going to object to MR. PORRITT: 17 form. 18 BY MR. ROSSMAN: 19 All right. Let's turn our attention, Ο. 20 Doctor, to Paragraph 165, okay, and this is the 21 paragraph where you explain how you calculated the 22 impact quantum, and it seems that there are three 23 components -- let's take a look at each of them. 24 165a, you say: First I find the 25 price of the ATM or at-the-money forward straddle

1 Formula is often expressed in terms of variance, 2 which is percent squared per year squared, very 3 clearly not a dollar number. And the problem with 4 the ambiguity and your comment about "good" and "fit" 5 is it depends on how you measure fit. 6 Seru's -- let me find Seru's report 7 and the graphs of this so-called smile. Seru's 8 implied volatility numbers diverge and become 9 hyperbolic in Exhibit 1. 10 So the scaling of this nonlinear 11 implied volatility function makes it seem like 12 options with low strike prices are wildly different 13 between puts and calls or between options with very 14 slightly different strike prices but some of those 15 options aren't worth very much. 16 So what seems like a bad fit -- I 17 don't know if Jennifer wants to mark that I made air 18 quotes with my fingers, but a bad fit, in this sense, 19 in terms of economic consequence, is very 20 unimportant. And so when you say the Black-Scholes 21 model has bad fit, you're referring to the tails, the 22 options that are far out of the money and are not 23 worth a lot. 24 And then when you talk about the 25 level or, you know, bad fit or bad application versus

1 Bester's paper you were referring to a moment ago, he 2 actually calculates an error rate, right? 3 He says -- you mean in both cases, 4 the error is larger --5 He calculates a percentage error for 0. 6 his model versus a percentage error for the 7 Black-Scholes model, right? 8 Α. Yes. 9 You didn't do that in -- in your Ο. 10 reports, correct? 11 Let me think. I -- I'm trying to Α. 12 think what I did. I was measuring changes in option 13 values across different scenarios in order to develop 14 my methodology. I looked at observed changes because 15 I don't know what the but-for scenarios would be and 16 there are many pairs but I -- when I examined the 17 performance of the model, I -- I focused more on 18 changes than on levels, but I did not -- and I looked 19 at dollars rather than percentage error which 20 emphasizes the low priced ones. So I did something 21 somewhat different from this. 22 Well, you -- am I correct, Professor, 23 that you did not calculate an error percentage or an 24 error rate? 25 A. I did not calculate the percentage

In Re Tesla, Inc. Securities Litigation

error and levels on the Black-Scholes model compared to another model.

- Q. And you didn't, in fact, compare your use of Black-Scholes model to any other model in your reports, right?
- A. Well, I would say that the Black-Scholes model with a different volatility input is, in fact, a different model because it gives an entirely different curve.
- Q. So to answer my question, you didn't use anything other than Black-Scholes, true?
- A. Again, in preliminary work, I confirmed that a model -- a model different from Black-Scholes could improve upon the levels exactly as this found, but was unnecessary because it did not significantly depart in terms of its predictions for changes. And then I -- rather than develop that, I looked in the literature and I found that Dumas, Fleming and Whaley did a comprehensive analysis which showed the same thing, that models which are very good at levels, can be very bad in predicting changes or out-of-sample changes in observed option prices. So I -- I realized I had merely confirmed what is already influentially documented in the literature and, therefore, I confined my remaining sensitivity

analysis to the Black-Scholes Formula with different volatility inputs.

- Q. So apart from changing the volatility inputs to the Black-Scholes model, it's true that you didn't use Professor Subrahmanyam, Professor Bester's or any other alternative model besides Black-Scholes, correct?
- A. Based on the Dumas, Fleming and Whaley findings and my familiarity with using a variety of models, which are published, I decided that my implementation of the Black-Scholes model is the most reasonable, reliable and robust procedure to use.
- Q. Okay. But you have no -- you have no ability to calibrate or check the model to tell me by how much your model is off?
- A. I have plenty of ability, and I've published many papers and programmed up many option prices and then I put plausible and different inputs in them to measure the option prices or the changes in prices.

Indeed, if you look at my 1993, stochastic volatility paper, I have exhibited that and shown that there are differences in the level of prices.

If I wanted to, I could measure the change but my familiarity with those models and my reading of the literature shows that those models don't have large differences in the changes and when I say "large" I did a cursory calculation showing a 90% correlation between the errors from one model and the errors from another. And it's just as easy to produce that by using the Black-Scholes with different volatilities.

So I went ahead and ran with the Black-Scholes model because it's much -- it's much more accepted. It's simpler. It's more robust and it's more reliable by requiring fewer inputs, being more parsimonious and simple and, therefore, I think, really the robustness is it avoids the pitfalls of all these complications, giving me more transparent and reliable results.

- Q. You knew, Professor Heston, that the Black-Scholes model that you relied on would be erroneous in certain respects, right?
  - A. I knew that all models are wrong.
- Q. So despite the fact that you knew that the model that you used was wrong, you're not in the position to tell me just how wrong it was -
  MR. PORRITT: I'm going to object to

option in the world where the alleged misstatements were made.

A. No. I would agree you would have to know the difference in the value -- in one scenario versus another and that is -- that is something important because I could overvalue every option by \$17 each and every day, but if I overvalue every option \$17 under any scenario, I could perfectly predict the change.

Now, this seems perhaps curious, but that's exactly what Dumas, Fleming and Whaley addressed in a paper that's been cited over a thousand times and which has dwarfed citations to some of these takeover papers.

They showed that the simpler model, the Black-Scholes model predicts changes in options one week out of sample, which is the order of magnitude of the Class Period, but they show the Black-Scholes model outperforms these complex calibrated models.

So I love fancy models and procedures, but I've experienced enough heartache from finding them not work that I know, especially during episodes where liquidity drops and bid-ask spreads widen, that I can get more reliable in robust

1 results with a simpler model, and I know, from my 2 historical work and my work with Tesla data, that 3 clearly option prices with one volatility, say 50 4 percent volatility, are different from option prices 5 with a 60% volatility, but if we just shock 6 volatility by 1 or 2 percent, the changes in option 7 values are remarkably similar under those two 8 calibrations. 9 So that makes my result more robust 10 and the prediction of changes or differences in value 11 is quite different than predictions of levels. 12 Well, Professor, could we take a look Ο. 13 at -- scroll down a little bit, please, so we can see 14 Exhibits 3 and 4. 15 I didn't realize I had control. Α. 16 Yeah. 17 Is this a good time for MR. PORRITT: 18 If we could just take one, that would be a break? 19 great. 20 Let me just finish a MR. ROSSMAN: 21 couple of questions here and then we can take a 22 break. 23 That's fine. MR. PORRITT: 24 BY MR. ROSSMAN: So you're referring to these Figures 25 Ο.

```
1
     3 and 4 and the bid-ask spread. Okay?
 2
            Α.
                    Yes.
 3
                    Do you recall -- you make the
            0.
4
     statement that -- that your -- give me one second and
5
     let me just quote it to you.
6
                    Paragraph 38, you say: My impact
7
     quantum methodology is largely within the bid-ask
8
     bounds of Professor Seru's calculations. Okay?
9
            Α.
                    Yes.
10
                    You actually go through and count in
            0.
11
     Figure 3 -- we did -- okay, there are 98 red dots.
12
     Of the 98 red dots, 59 of them, okay, fall within the
13
     yellow and blue dots. 40 do not. Okay?
14
     Approximately 40% do not.
15
                    Does that sound right to you?
16
            Α.
                    I won't dispute it now.
17
                    Okay. So when you say "they largely
            0.
18
     fall within the bid-ask, " 40% of them are outside the
19
     boundary that you create.
20
                    Any reason to dispute that?
21
            A.
                    Not now.
22
                    Okay. And of the -- the ones that
            0.
23
     are within the -- what you describe as "near the
24
     money" -- I think your parameters is 20%?
25
            A.
                    Okay.
```

1	Q. Okay? There's 19 red dots that are
2	near the money, only three of those are within the
3	bid-ask bounds.
4	So over 80% are outside the bid-ask
5	bounds that you created.
6	Do you have any reason to disagree
7	with that?
8	A. No, not now.
9	Q. Okay. And in Figure 4, okay, again,
10	there are 98 red dots, okay, 42 fall within the
11	bounds, meaning approximately 57% fall outside of the
12	bid-ask boundary that you created.
13	Any reason to disagree with that?
14	A. No.
15	Q. And of the 19 that are near the money
16	in Figure 4, every single one is outside of the
17	bid-ask boundary that you create.
18	Any reason to disagree with that?
19	A. No.
20	Q. Okay. You stand by your statement
21	that the impact quantum methodology is largely within
22	the bid-ask bounds of Professor Seru's calculations?
23	A. I'd say that the deviation of of
24	the red dots from those from the yellow or the
25	deviation of mine is small by comparison of two

- changes in values. These are calculations between one scenario and a different but-for scenario and, therefore, my answer does not apply to these graphs and I did not ask him -- he did not tell me to say this and did not approve it or disapprove it. I said I wanted to say this.
- Q. So that I understand, it's your testimony in this deposition, that during the break, when you decided to amend or continue your answer, that came to you all by yourself without any provocation or assistance from counsel or the expert team at Fideres?
  - A. That is right.
- Q. Now, you also made a comparison of your model-based prices to actual prices in Figures 1 and 2 of your supplemental report, correct?
- A. Let me more carefully look at Figures

  1 and 2 here, make sure I've got the right report or
  the right figures.
- So -- yeah, so there we have the model versus actual prices in Figures 1 and 2 as opposed to the damage estimates in Figures 3 and 4.
- Q. Okay. And you would expect that your model-based prices should be within the bid-ask spread of actual prices for options on the same

```
1
     dates?
2
            A.
                    Yes.
                          Ideally, they should be close
3
     or within the bid-ask spread.
4
                    In many cases, they are. And for
5
     some of the dots, they're close, but are not.
6
                    And if you look at Figure 2, okay,
            0.
7
     which is showing the difference in Tesla put option
8
     prices between August 6th and August 8th, comparing
9
     the model to actual prices for the January 17, 2020
10
     expiry, okay, you agree with me that the majority of
11
     the red dots showing your model-based prices do not
12
     fall within the bid-ask range?
13
            A.
                    I would have to count a lot. Yeah, I
14
     don't know if that's the right metric, but some of
15
     them don't. Some of them do.
16
                    Okay. We counted. Actually, most of
            0.
17
     them don't. 37 of the 98 red dots fall within the
            61 of the 98 red dots don't; fall outside the
18
     range.
19
     range. Approximately 62% fall outside the bid-ask
20
     range.
21
                    Does that seem right to you?
22
                    MR. PORRITT: I will object to form.
23
                    Well, it doesn't seem like the right
            Α.
24
     metric, but it does seem right in terms of counting.
25
```

difference is small.

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1
     based on the observed bid ask, right?
 2
                     I don't know that I'd call that my
            Α.
 3
     option price.
                     This is a damage model designed to
     compute an impact quantum in L; not designed to match
 4
 5
     the level of the curve but to match the changes in
 6
     it.
 7
                     So when you say "my price," that is
 8
     not a calculation designed to match your prediction.
 9
                     Well, let's look at -- you talk about
            0.
10
     differences between levels and changes, right?
11
                     And I think you -- you agreed with me
12
     that your model is not designed to accurately predict
13
     levels?
14
                     That's right. My model is designed
            Α.
15
     to calibrate and fit movements in values between --
16
     you know, between this refitted and counterfactual
17
     input.
18
                     So if we now look at Columns X and
            Ο.
19
     Y --
20
            Α.
                     Yeah.
21
                     -- the damage figures, depending on
            Ο.
22
     whether you use the ask price or the bid price, go at
23
     a range of $1.63 at the bid to $4.06 at the ask,
24
     right?
25
            Α.
                     Yes.
```

Deposition of Steven Heston

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options fell and/or the stock price rose.

- Now, the volatilities -- but you're 0. not offering any conclusions as to whether any statements made by Tesla or Mr. Musk impacted the volatility?
- No, I am not. My expertise is to say **A**. that if you tell me that the volatility shouldn't have changed or should have changed by a different amount, I can tell you the consequences for the change in values of all the options of all strike prices and expirations.
- Now, do you have a view as to Ο. Okav. what causes implied volatilities in individual stocks that change over time?
- Well, volatility is a measure of Α. uncertainty and we need -- if we want to get careful and technical, we can say that it's the price in a certain sense, which I can make rigorous, the price of that uncertainty, but the point is that when volatility goes up, option prices increase, and when volatility goes down, option prices decrease.

So we call it the risk-neutral probability, but it's just the price. That's what people are willing to pay for options on risk, so in that sort of colloquial sense, it's a measure of

1 uncertainty or the price of uncertainty. 2 0. Now, do companies specific volatility 3 measures change based on market-wide phenomena? 4 The volatility is based on the price Α. 5 of options, and to the extent that what you -- I'm 6 not sure what you mean by "market-wide phenomena," 7 but to the extent that those impact Tesla option 8 values or actual transacted prices which I used, 9 definitionally, they affect that number. 10 And the volatilities of specific 0. 11 companies like Tesla, did they change based on 12 industry factors? 13 A. You said based on history factors? 14 0. Industry. 15 Industry factors? A. 16 In the industry which a company Q. 17 operates. 18 I really don't have an opinion on why **A**. 19 the volatility of Tesla or other things change. I'm 20 not denying that this is possible, but I have not 21 formed an opinion on why prices change. 22 I've merely formed an opinion that 23 the price changes and options can largely be 24 summarized by changes in the stock price and changes 25 in volatility as measured by at-the-money straddles.

1 relationship to other Tesla options than the S&P 500 2 does. 3 Now, Professor, did you -- during the Ο. Class Period, August 7th to the 17th, did you do 4 5 anything to account for or to extract the impact on 6 volatility of other forces, whether market forces, 7 industry forces or something else? 8 Α. I did it by comparing Tesla options 9 to other Tesla options, I implicitly accounted for 10 all forces that would affect Tesla options in common, 11 but I -- and that's why I did not explicitly try and 12 formulate some methodology relating to Tesla 13 volatility to Tesla non-volatility because that would 14 incorporate additional assumptions. 15 Now, you -- what you Ο. Okav. 16 essentially did was you built a model to measure the 17 change in prices based on assumed change in applied 18 Is that generally accurate? volatility. 19 Yes, based on the changes in the Α. 20 stock price and changes in the applied volatility. 21 0. So just focusing on the changes, on 22 the quantum of changes --23 A. Yes. 24 -- the impact quantum, did you do Q. 25 anything to assess whether some or all of that impact

1 quantum was the result of non-company-specific 2 factors? 3 I don't have an opinion on why those 4 things move. To guote Larry Summers, the former 5 president of Harvard, I am a mere Ketchup economist 6 who says a 16-ounce bottle of Ketchup is worth twice 7 an 8-ounce bottle of Ketchup, and I value one option 8 in terms of another or in terms of the stock price. 9 So I do a relative valuation without deciding why 10 stock prices move or why volatility moved. That is 11 the at-the-money straddle. 12 And am I right, sir, that you didn't 0. 13 make any effort to try to exact from your impact 14 quantum changes that were due to statements that the 15 plaintiffs do not challenge, do not claim were false 16 or misleading? 17 I have no opinion on why they changed A. 18 or the response to what information they changed, but 19 I -- I will say that if you look at Figure 17, Figure 20 17 shows the prices of at-the-money straddles. This 21 is on page 47. 22 Go ahead. Ο. 23 Α. This is becoming a happy conversation 24 because I love these graphs. And I may never get to 25 present them again.

1 the quote from the paper, depending on your time 2 preference. 3 But they write that options are the 0. 4 best ones for determining volatility? 5 Α. What options? I'm sorry. 6 Ο. At-the-money. 7 Α. At-the-money options. 8 And what you used here were 0. 9 at-the-money options to extrapolate the value of all 10 2400 options, right? 11 MR. PORRITT: Object to form. 12 I used the at-the-money or the A. 13 changes in the at-the-money vol to measure changes in 14 the values of other options. 15 And you would agree with me, I think Ο. 16 this is your testimony, that your model works better 17 for options that are closer to the money? 18 Objection to form. MR. PORRITT: 19 Testimony will speak for itself as does his report. 20 BY MR. ROSSMAN: 21 Ο. It's true your model works better for 22 options that are closer to the money, right, 23 Professor? 24 MR. PORRITT: Same objections. 25 Α. Again, when say "works," I find that

1	UNITED STATES DISTRICT COURT
2	FOR THE NORTHERN DISTRICT OF CALIFORNIA
3	I, Jennifer L. Wielage, CCR No. 30X100191600,
4	Certified Court Reporter, certify:
5	That the foregoing proceedings were taken
6	before me at the time and place therein set forth, at
7	which time the witness was put under oath by me;
8	That the testimony of the witness, the
9	questions propounded, and all objections and
10	statements made at the time of the examination were
11	recorded stenographically by me and were thereafter
12	transcribed;
13	That a review of the transcript by the
14	deponent was requested;
15	That the foregoing is a true and correct
16	transcript of my shorthand notes so taken.
17	I further certify that I am not a relative or
18	employee of any attorney of the parties, nor
19	financially interested in the action.
20	I declare under penalty of perjury under the
21	laws of California that the foregoing is true and
22	correct.
23	Dated this 16th day of March 2022.
24	gennifer L. Wielage
25	Jennifer L. Wielage, CCR, RPR, CRR

# EXHIBIT D

Cases in Dr. Hartzmark's Appendix 8 in Which Inflation Is Greater Than Mid Price

				Hartzmark	Hartzmark	Hartzmark	
Expiration	Strike	Date	Option Type	Revalued	But For	Inflation	Mid
8/10/2018	\$380	8/7/2018	Call	\$9.02	\$0.00	\$9.01	\$8.90
8/17/2018	\$340	8/15/2018	Call	\$4.34	\$0.05	\$4.30	\$4.20
8/17/2018	\$340	8/16/2018	Call	\$1.37	\$0.00	\$1.37	\$1.32
8/17/2018	\$380	8/7/2018	Call	\$13.31	\$0.16	\$13.16	\$12.50
8/17/2018	\$380	8/8/2018	Call	\$8.08	\$0.08	\$8.00	\$7.78
8/17/2018	\$380	8/10/2018	Call	\$2.94	\$0.04	\$2.90	\$2.44
8/17/2018	\$380	8/13/2018	Call	\$1.52	\$0.00	\$1.51	\$1.41
8/17/2018	\$420	8/7/2018	Call	\$2.26	\$0.00	\$2.26	\$1.55
8/17/2018	\$420	8/8/2018	Call	\$0.88	\$0.00	\$0.88	\$0.73
8/24/2018	\$380	8/8/2018	Call	\$11.29	\$0.43	\$10.86	\$10.68
8/24/2018	\$380	8/9/2018	Call	\$7.18	\$0.94	\$6.24	\$6.10
8/24/2018	\$380	8/10/2018	Call	\$6.50	\$0.52	\$5.97	\$5.35
8/24/2018	\$380	8/13/2018	Call	\$4.86	\$0.20	\$4.67	\$4.00
8/24/2018	\$380	8/14/2018	Call	\$2.00	\$0.07	\$1.93	\$1.91
8/24/2018	\$420	8/7/2018	Call	\$3.19	\$0.02	\$3.17	\$2.75
8/24/2018	\$420	8/8/2018	Call	\$2.27	\$0.03	\$2.24	\$1.61
8/24/2018	\$420	8/9/2018	Call	\$1.51	\$0.10	\$1.40	\$0.94
8/24/2018	\$420	8/10/2018	Call	\$1.09	\$0.04	\$1.06	\$0.65
8/24/2018	\$420	8/13/2018	Call	\$0.52	\$0.01	\$0.52	\$0.35
8/24/2018	\$460	8/8/2018	Call	\$0.29	\$0.00	\$0.29	\$0.21
8/24/2018	\$460	8/9/2018	Call	\$0.23	\$0.01	\$0.22	\$0.13
8/31/2018	\$380	8/10/2018	Call	\$9.33	\$1.34	\$7.99	\$7.68
8/31/2018	\$380	8/13/2018	Call	\$7.74	\$0.76	\$6.98	\$6.25
8/31/2018	\$380	8/14/2018	Call	\$4.52	\$0.53	\$3.99	\$3.65
8/31/2018	\$420	8/7/2018	Call	\$5.08	\$0.08	\$4.99	\$2.58
8/31/2018	\$420	8/8/2018	Call	\$3.66	\$0.10	\$3.55	\$2.38
8/31/2018	\$420	8/9/2018	Call	\$2.74	\$0.33	\$2.41	\$1.44
8/31/2018	\$420	8/10/2018	Call	\$2.39	\$0.19	\$2.20	\$1.16
8/31/2018	\$420	8/13/2018	Call	\$1.56	\$0.07	\$1.49	\$0.98
8/31/2018	\$420	8/14/2018	Call	\$0.66	\$0.04	\$0.62	\$0.62
8/31/2018	\$460	8/8/2018	Call	\$0.71	\$0.01	\$0.70	\$0.34
8/31/2018	\$460	8/9/2018	Call	\$0.63	\$0.05	\$0.58	\$0.29
9/7/2018	\$380	8/13/2018	Call	\$9.73	\$1.37	\$8.36	\$8.23
9/7/2018	\$380	8/14/2018	Call	\$6.44	\$1.13	\$5.31	\$4.98
9/7/2018	\$420	8/7/2018	Call	\$6.68	\$0.21	\$6.48	\$3.93
9/7/2018	\$420	8/8/2018	Call	\$4.85	\$0.22	\$4.62	\$3.03
9/7/2018	\$420	8/9/2018	Call	\$3.91	\$0.64	\$3.27	\$1.87
9/7/2018	\$420	8/10/2018	Call	\$3.48	\$0.41	\$3.07	\$2.28
9/7/2018	\$420	8/13/2018	Call	\$2.54	\$0.20	\$2.34	\$0.91
9/7/2018	\$420	8/14/2018	Call	\$1.38	\$0.14	\$1.24	\$0.91
9/7/2018	\$420	8/15/2018	Call	\$0.86	\$0.15	\$0.71	\$0.69
9/7/2018	\$460	8/9/2018	Call	\$1.11	\$0.13	\$0.99	\$0.36
9/7/2018	\$460	8/14/2018	Call	\$0.22	\$0.01	\$0.21	\$0.19

				Hartzmark	Hartzmark	Hartzmark	
Expiration	Strike	Date	Option Type	Revalued	But For	Inflation	Mid
9/7/2018	\$500	8/8/2018	Call	\$0.23	\$0.00	\$0.23	\$0.14
9/14/2018	\$380	8/13/2018	Call	\$11.98	\$2.25	\$9.73	\$9.73
9/14/2018	\$380	8/14/2018	Call	\$8.56	\$2.01	\$6.55	\$6.53
9/14/2018	\$420	8/7/2018	Call	\$7.11	\$0.25	\$6.86	\$3.60
9/14/2018	\$420	8/8/2018	Call	\$6.17	\$0.42	\$5.76	\$3.75
9/14/2018	\$420	8/9/2018	Call	\$5.15	\$1.04	\$4.11	\$2.42
9/14/2018	\$420	8/10/2018	Call	\$4.81	\$0.76	\$4.05	\$3.38
9/14/2018	\$420	8/13/2018	Call	\$3.85	\$0.46	\$3.39	\$1.09
9/14/2018	\$420	8/14/2018	Call	\$2.40	\$0.38	\$2.02	\$1.26
9/14/2018	\$420	8/15/2018	Call	\$1.63	\$0.40	\$1.23	\$0.89
9/14/2018	\$420	8/16/2018	Call	\$1.18	\$0.32	\$0.87	\$0.72
9/14/2018	\$460	8/8/2018	Call	\$1.80	\$0.07	\$1.73	\$0.67
9/14/2018	\$460	8/9/2018	Call	\$1.72	\$0.26	\$1.46	\$0.44
9/14/2018	\$460	8/14/2018	Call	\$0.55	\$0.06	\$0.49	\$0.33
9/14/2018	\$500	8/8/2018	Call	\$0.44	\$0.01	\$0.43	\$0.20
9/21/2018	\$420	8/7/2018	Call	\$8.42	\$0.41	\$8.00	\$4.50
9/21/2018	\$420	8/8/2018	Call	\$7.21	\$0.61	\$6.60	\$4.35
9/21/2018	\$420	8/9/2018	Call	\$6.33	\$1.49	\$4.84	\$2.69
9/21/2018	\$420	8/10/2018	Call	\$6.04	\$1.16	\$4.88	\$2.59
9/21/2018	\$420	8/13/2018	Call	\$5.09	\$0.79	\$4.30	\$2.28
9/21/2018	\$420	8/14/2018	Call	\$3.48	\$0.71	\$2.77	\$1.63
9/21/2018	\$420	8/15/2018	Call	\$2.49	\$0.74	\$1.75	\$1.05
9/21/2018	\$420	8/16/2018	Call	\$1.93	\$0.63	\$1.30	\$0.87
9/21/2018	\$460	8/8/2018	Call	\$2.34	\$0.12	\$2.22	\$0.84
9/21/2018	\$460	8/9/2018	Call	\$2.36	\$0.43	\$1.93	\$0.58
9/21/2018	\$460	8/10/2018	Call	\$2.13	\$0.30	\$1.83	\$1.78
9/21/2018	\$460	8/13/2018	Call	\$1.61	\$0.17	\$1.43	\$0.42
9/21/2018	\$460	8/14/2018	Call	\$0.99	\$0.15	\$0.84	\$0.40
9/21/2018	\$460	8/15/2018	Call	\$0.67	\$0.16	\$0.51	\$0.34
9/21/2018	\$460	8/16/2018	Call	\$0.47	\$0.12	\$0.35	\$0.31
9/21/2018	\$500	8/7/2018	Call	\$0.70	\$0.01	\$0.69	\$0.55
9/21/2018	\$500	8/8/2018	Call	\$0.66	\$0.02	\$0.64	\$0.22
9/21/2018	\$500	8/9/2018	Call	\$0.81	\$0.12	\$0.69	\$0.17
9/21/2018	\$500	8/10/2018	Call	\$0.68	\$0.07	\$0.61	\$0.60
9/21/2018	\$500	8/13/2018	Call	\$0.45	\$0.03	\$0.41	\$0.14
9/21/2018	\$500	8/14/2018	Call	\$0.25	\$0.03	\$0.22	\$0.14
9/28/2018	\$420	8/10/2018	Call	\$7.24	\$1.61	\$5.63	\$4.43
9/28/2018	\$420	8/13/2018	Call	\$6.22	\$1.16	\$5.06	\$2.77
9/28/2018	\$420	8/14/2018	Call	\$4.51	\$1.10	\$3.41	\$1.95
9/28/2018	\$420	8/15/2018	Call	\$3.40	\$1.16	\$2.24	\$1.16
9/28/2018	\$420	8/16/2018	Call	\$2.80	\$1.05	\$1.75	\$1.00
10/19/2018	\$460	8/7/2018	Call	\$5.65	\$2.96	\$2.69	\$2.60
10/19/2018	\$460	8/8/2018	Call	\$5.41	\$2.87	\$2.54	\$1.93
10/19/2018	\$460	8/9/2018	Call	\$5.55	\$2.78	\$2.77	\$1.53
10/19/2018	\$460	8/10/2018	Call	\$5.18	\$2.69	\$2.49	\$0.98

Case 3:18-cv-04865-EMC Document 485 Filed 09/20/22 Page 56 of 638

				Hartzmark	Hartzmark	Hartzmark	
Expiration	Strike	Date	Option Type	Revalued	But For	Inflation	Mid
10/19/2018	\$460	8/13/2018	Call	\$4.50	\$2.44	\$2.06	\$1.11
10/19/2018	\$460	8/14/2018	Call	\$3.40	\$2.35	\$1.05	\$0.88
10/19/2018	\$500	8/7/2018	Call	\$2.20	\$1.42	\$0.78	\$0.59
10/19/2018	\$500	8/8/2018	Call	\$2.23	\$1.37	\$0.87	\$0.42
10/19/2018	\$500	8/9/2018	Call	\$2.62	\$1.31	\$1.30	\$0.40
10/19/2018	\$500	8/10/2018	Call	\$2.34	\$1.26	\$1.08	\$0.42
10/19/2018	\$500	8/13/2018	Call	\$1.91	\$1.11	\$0.80	\$0.33
10/19/2018	\$500	8/14/2018	Call	\$1.39	\$1.06	\$0.33	\$0.21
11/16/2018	\$460	8/9/2018	Call	\$9.43	\$6.03	\$3.41	\$3.19
11/16/2018	\$460	8/10/2018	Call	\$9.25	\$5.92	\$3.34	\$3.18
11/16/2018	\$460	8/13/2018	Call	\$8.45	\$5.59	\$2.86	\$2.75
11/16/2018	\$500	8/9/2018	Call	\$5.29	\$3.48	\$1.81	\$1.51
11/16/2018	\$500	8/10/2018	Call	\$5.09	\$3.40	\$1.69	\$0.83
11/16/2018	\$500	8/13/2018	Call	\$4.49	\$3.17	\$1.33	\$0.84
12/21/2018	\$500	8/9/2018	Call	\$7.83	\$5.56	\$2.27	\$2.23
12/21/2018	\$500	8/13/2018	Call	\$6.83	\$5.23	\$1.60	\$1.35
1/18/2019	\$500	8/9/2018	Call	\$10.01	\$7.36	\$2.64	\$2.60

 $\textbf{Sources:} \ Expert \ Damages \ Report \ of \ Michael \ L. \ Hartzmark, Ph.D., \ November \ 10, 2021; \ CBOE \ Data.$ 

#### Notes:

<sup>1.</sup> For a particular date, only options which had positive open interest and positive bid and ask quotes at the end of the day were included in the analysis.

<sup>2.</sup> The mid price on a particular date is calculated as the average of the bid and ask quotes at the end of day.

<sup>3.</sup> The analysis was limited to options in Dr. Hartzmark's Appendix 8. The re-valued price, but-for price, and inflation are from Dr. Hartzmark's Appendix 8. The but-for price and inflation are based on Dr. Hartzmark's Direct & Consequential Effects amounts.

# EXHIBIT E

#### Case 3:18-cv-04865-EMC Document 485 Filed 09/20/22 Page 58 of 638

#### Options in Professor Heston's Figures 1-4 Within Bid-Ask Bounds

			% of Options	% of Options	NTM Options		% of NTM	% of NTM
	Options Within		Within Bid-Ask	Outside Bid-Ask	Within Bid-Ask	Total NTM	Options Within	Options Outside
Figure	Bid-Ask Bounds	<b>Total Options</b>	Bounds	Bounds	Bounds	Options	Bid-Ask Bounds	Bid-Ask Bounds
Figure 1	85	98	87%	13%	16	16	100%	0%
Figure 2	37	98	38%	62%	1	16	6%	94%
Figure 3	59	98	60%	40%	3	19	16%	84%
Figure 4	42	98	43%	57%	0	19	0%	100%

**Source:** Supplemental Expert Report of Steven L. Heston, PhD, March 5, 2022; "TeslaBackupMaterial\_20220305\_final.xlsx" **Notes:** 

- 1. For figures 1 and 2, an option is counted as Near-The-Money (NTM) if the strike price is within 20% of the stock price on both August 6 and August 8.
- 2. For figures 3 and 4, an option is counted as Near-The-Money if the strike price is within 20% of the stock price on August 7 and August 8, respectively.

## **EXHIBIT F**



#### 18 Feb 2019 Keeping Your Options Open

Posted at 16:02 in Research by Steffen Hennig

#### **Key Findings**

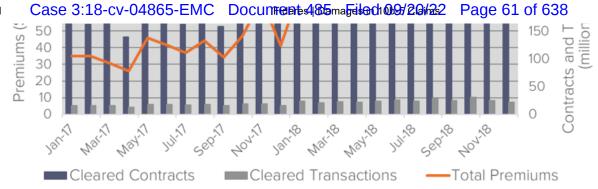
- Class definition in securities fraud claims is often restricted to shares, neglecting the holders of options who are also damaged
- Traded volume and therefore damages can be particularly large for publicly listed companies that attract highly leveraged speculative trading
- In this Research Alert, we explore available methodologies for the estimation of damages for option holders, both on a class-wide and individual basis

## The Options Market

Options give the holder the right, but not the obligation, to buy (*call option*) or sell (*put option*) an *underlying* asset at a specified *strike* price, prior to or on a specified expiration date (*maturity*). The price for buying an option is called the *premium*. The market for options, both in terms of premia and the traded value of contracts, has a volume of billions of dollars and continues to grow:







Source: *The Option Clearing Corporation* (https://www.theocc.com/webapps/monthly-volume-reports)

## What Affects The Price Of An Option?

Option values are particularly sensitive to changes in market conditions. Sophisticated pricing models have to be used to quantifying these effects. The following inputs, ordered by importance for the vast majority of option contracts, are most relevant: underlying stock's price, market's expectation of future volatility (so-called *implied volatility*), underlying's historical volatility, time to maturity, interest rates and dividends.

New market information can materially affect these factors, especially the stock's price and the implied volatility. The table below provides an example of how small changes in share prices and implied volatilities have large impacts on the price of put and call options. These figures refer to an option with a maturity of six months and strike price of \$100.

Share Price	Implied Volatility	Call Option Price	Put Option Price
\$ 100	20%	\$ 6.63	\$ 5.08
\$ 110	20%	\$ 13.70 (+107%)	\$ 1.72 (-66%)
\$ 90	20%	\$ 2.22 (-66%)	\$ 10.24 (+102%)
\$100	30%	\$ 9.39 (+42%)	\$ 7.84 (+54%)

## Options And Ongoing 10b-5 Cases

Both sellers and buyers of options can suffer damages in securities fraud cases. Total option premia of large companies amount to hundreds of millions of dollars. This table summarizes option premia and trading volumes for selected companies that are currently defendants in 10b-5 class actions:

Company	Case	End of class period (month)	Transactions in month at end of class period (thousands) <sup>2</sup>	Total premiums in month at end of class period (\$ billions) <sup>3</sup>
Facebook	Violation of own data privacy policies	July 2018	1,361	4.88
Goldman Sachs	Misleading publication of financial condition	April 2010	1,316	4.72
Tesla	Misleading "Funding Secured" Tweet	August 2018	1,204	4.32
T	Misleading statements	July	0.40	2.22

4/5/22, 4:19 PM Case 3:18-cv-04865-EMC Documented to Document of D

l witter	about business prospects	2015	648	2.32
Alibaba	Dubious or illegal business practices	January 2015	603	2.16
Exxon Mobil	False reports on climate change recognition	January 2017	212	0.76
Johnson & Johnson	Asbestos in baby powder	Decemb er 2018	191	0.69

Source: CBOE

Note that these figures are based on an average premium of \$432 per contract and an average of 8.3 contracts per transaction, drawn from the December 2018 Options Clearing Corporation report.

### Illustrative Example: Johnson And Johnson

This example shows the effect on option positions particularly clearly. In December 2018, Reuters reported that "Johnson & Johnson knew about asbestos in its baby powder for decades".[3] JNJ share price dropped precipitously as soon as the news broke:

Johnson & Johnson (JNJ US) Stock Price



Source: Bloomberg, Fideres's analysis

Option positions were heavily affected by this decline in share price.

Johnson & Johnson Stock Price and Options Trade Volume



Options Volume —JNJ Share Price

Source: Bloomberg, Fideres's analysis

Bloomberg lists 7760 different available/traded option contracts for Johnson & Johnson in December 2018. The following chart shows the price changes for two exemplary options that are both liquidly traded and significantly affected by the observed price drop in the stock:

- Call, strike \$130, maturity 18 January 2019, and
- Put, strike \$130, maturity 18 January 2019.



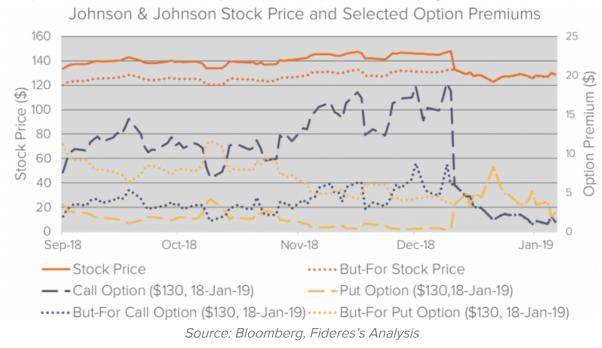
As illustrated, the call option lost approximately 75% (or \$12) of its value per contract on December 14 2018. The put option gained 1300% (\$3.25) per contract that day. Premiums of put options and call options react inversely to changes in the share price, but from a perspective of trading strategies, a clients' option portfolio is often either "long" or "short" on the underlying. Furthermore, as elaborated on in section 3, other market factors influence options values.

In addition to the 7760 different option contracts in December, further option premiums are affected by the event on December 14, since the class-period is longer than only a few weeks and the underlying equity's price behavior was artificially distorted for a longer period.

Due to the non-linear, rather complicated scaling behavior of value changes in option positions, damages have to be calculated for specific option portfolios (or the portfolio of all open option contracts).

# Inclusion Of Option Damages Into Established Methodology

Damages on stock positions are calculated using event studies and by determining the share prices in a "but-for" world, where the relevant information was reflected in a timely manner. Option pricing models can be adapted to the event study framework and used to estimate damages on option positions in 10b5 claims. The following chart shows the calculation of "but-for" prices for the mentioned JNJ options (section 5) and the underlying stock:



The estimated "but-for" prices for options can be used to calculate damages incurred on portfolios that comprise of options and/or equity positions. Given the large volume of option positions, this approach significantly increases and better reflects the overall damages in 10b-5 cases.



#### Steffen Hennig

Steffen is a founding partner of Fideres with over 18 years' experience in structured products and complex derivatives across all major asset classes. Steffen is responsible for the quantitative analysis of consulting mandates and has handled various complex benchmark manipulation cases, including LIBOR and ISDAfix, and cases relating

to the mis-selling of structured product and derivatives. Prior to founding Fideres, he held a senior position at The Royal Bank of Scotland were he moved to after working for 5 years at Deutsche Bank. Steffen holds a master-level degree in Mathematics from the University of Erlangen, the Certificate of Advanced Studies in Mathematics (Part III) from the University of Cambridge and an MSc in Financial Engineering and Quantitative Analysis from the ICMA Centre at the University of Reading.

**TAGS:** Securities Litigation

# EXHIBIT G

1 If it's the case that the Court 2 were to determine that only 22.35 is of 3 the appropriate inflation, then the 4 but-for price is 379.57 minus 23.27. I 5 mean, it's very straightforward and it's 6 The -- I quess the point is very simple. 7 the statistical significance on the back 8 end is not relevant for the event window. 9 BY MR. ROSSMAN: 10 0 Okay. Now, you did an event study for 11 this stock -- for the trading of the stock here; 12 right? 13 I did a number of event studies for the Α 14 stock. 15 And you did an event study for the notes? 0 16 Α And I did an event study for the notes, 17 yes. 18 Okay. You did not do an event study for Q 19 the options; correct? 20 A reliable event study, you know, A 21 understanding the nature of options, it's -- in 22 fact, I don't know if I have, especially in the 23 context of litigation, seen a reliable event 24 study. I've seen people attempt various event 25 studies with options. The problem with options

```
1
      are -- you know, take, for example, this
2
      particular situation, where it's, you know, using
3
      daily data, you only have ten. But you even had
4
      options that expired during the period. You have
5
      substantial changes because of issues associated
6
      with -- with time to maturity. But I did not do
7
      an event study with respect to the options. I did
8
      look at cause and effect in my class certification
9
      report.
10
              Have you ever done an event study for
       0
11
      options before?
12
              Not that I can recall.
       A
13
       0
              Okay.
                     Have you ever seen anyone do it?
14
       A
              Yes.
15
                     Now, did you rely on the event
       0
              Okav.
16
      study to reach the conclusion that there was a
17
      cumulative abnormal return on the stock price of
18
      negative 17.5 percent during the class period?
19
              I ran the event study and I observed an
       Δ
20
      abnormal cumulative return of 17.56 percent, and
21
      taking the price and adjusting for market effects,
22
      I said that at that point the price would be
23
      312.90.
24
                     And just -- the difference between
       0
25
      the cumulative return and 19.5- -- of
```

```
1
      to me.
 2
       Α
              That went down at the open.
 3
                   I can -- I can show this -- I see
 4
      no -- I -- again, I use the daily open. I think
 5
      there -- I mean, again, doing a minute-by-minute
 6
      analysis of this, you could argue that it's 386.
 7
      If you want to argue that it's 369 instead of 379,
 8
      you can argue that. I've given all the
 9
      information that I can as it relates to it, and
10
      I've used the commonly utilized approach of daily
11
      closing price with which to value the Musk tweets.
12
       0
              Okay. You can't -- Professor, you can't
13
      separate out the movement in the price or the
14
      options or the notes based on any specific
15
      statements that were made on August 7th from any
16
      other statements that were made on August 7th;
17
      right?
18
                  MR. PORRITT: Object to form.
19
                  THE WITNESS: As I said, it's an
20
           interwoven bundle, and that's what I've
21
           used.
                  Yes, it's an interwoven bundle.
22
                                 Okay. Let's take a
                  MR. ROSSMAN:
23
           quick break.
24
                  THE VIDEOGRAPHER: Off the record,
25
           3:06 p.m.
```

1 BY MR. ROSSMAN: 2 0 Now, do you have an opinion about whether 3 there would be consequences anyway -- in other 4 words, do you have an opinion on whether there 5 would be an impact on the stock anyway if the 6 tweets were true but caused market disruption? 7 Α I haven't considered that, and it sounds 8 more like a legal question to me. So, no, I 9 haven't considered that. 10 Okay. And it -- certainly the finder of 0 11 fact could find that the tweets were true in part 12 and false in part. There's nothing in your 13 analysis that allows us to sort out the impact 14 from those tweets that are true from those tweets, 15 you know, which, you know, could ultimately be 16 determined to be false? 17 MR. PORRITT: Object to form; asked 18 and answered. 19 THE WITNESS: I believe we spent 2.0 the whole morning talking about this, that 21 this was an interwoven bundle of 22 information. And to the extent that the 23 finder of fact would determine that there 24 is some separation and that this isn't, I 25 quess, like a cauldron that has been

1 polluted by a drop -- or more than a 2 drop -- a cup of the water, I mean, again, 3 I am not a lawyer. I can't tell you 4 whether having, you know, ten categories 5 and having five of them being false and 6 five of them being true means that a 7 statement is false or true. It seems to 8 me it's like, you know, pissing in a pool. 9 You know, you can tell me that the pool --10 once I put in a little bit, it's toxic 11 thereafter. I'm not the lawyer here. 12 To the extent that the finder of 13 fact would say, "Oh, somehow I'm going to 14 say that part of the Musk tweets are true 15 and part of them are false, and I want to 16 somehow separate the bundle, "that's up to 17 the finder of fact. And to the extent 18 that the finder of fact gives me the role, 19 as the economist, to separate it, say, 20 90 percent false, 10 percent true, and 21 that that's what they believe is the case 22 so that the price impact that I observed 23 of 23.27 is \$2.30 lower in terms of 24 inflation, I can make that adjustment. 25 But I have not looked at this in a way

1 inflation, a precise measure every day. If the 2 finder of fact wants to weigh different components 3 of it, I can just -- just plug it in. But I've 4 looked at this as an interwoven bundle, and I 5 have -- and the consequential damages could be in 6 the same way that the direct damages, they could 7 be allocated or weighed, and I would adjust my 8 damage calculations. 9 You say that, Doctor, but you actually 0 10 can't. If I say to you, for example, okay, let's 11 imagine that -- that the "funding secured" is 12 determined to be false, but the "Am considering 13 taking Tesla private at 420," you can't tell me 14 what portion of consequential damages flow from 15 the first statement versus the second statement? 16 Α I'm not making a legal decision. 17 Court would make that decision. 18 But you can't use -- I'm saying take that 0 19 as a hypothetical. Imagine -- I don't imagine 20 that. I imagine the finder of fact is going to 21 determine they're all true. But take it as a 22 hypothetical, that the finder of fact determines 23 that the second statement, "funding secured," 24 okay, and only the second statement is false, but 25 the first is determined to be true. I'm asking

1 you -- and you tell me if I'm wrong -- there's no 2 means in any of your analyses to allocate portions 3 of consequential damages to one versus the other? 4 MR. PORRITT: Object to form. It's 5 vague; compound; misleading; also asked 6 and answered. 7 THE WITNESS: Yeah. I -- again, my 8 assumption was it's an interwoven bundle. 9 That even if what you said is true, that 10 the finder of fact will find that the 11 falsity of a portion of the Musk tweets 12 makes the Musk tweets, as an interwoven 13 basket, a falsity and moved the market and 14 impacted the market because of false 15 information. 16 As to the consequential damages, to 17 the extent that the finder of fact picked 18 out certain components that were and were 19 not, I could either do another analysis 20 or, more likely, as I understand these 21 types of proceedings, would give me the 22 engagement, or someone else, to take my 23 formulas and make an adjustment to 24 consequential damages. Again, 90 percent 25 consequential damages are -- are related

```
1
           in your hypothetical world to the falsity
2
           and 10 percent are not. But I have not
3
           separated that in my report. I think
4
           that's pretty obvious.
5
      BY MR. ROSSMAN:
6
              Now -- now, could you turn your attention
       0
7
      to Page 132 of your report and Table 8.
8
                  Okay. Go to the top, please, and
9
      vou'll see Table 8. And I'm --
10
       Α
              What page was that again?
11
              132. I said 132.
       0
12
                  Now, if you were to imagine that the
13
      finder of fact determines that --
14
       Α
              Hold on. I'm sorry. Hold on a second.
15
      I've lost -- 135, 137, 150 -- I jumped from 126.
16
      I must have turned something around. Excuse me.
17
              You'll recognize it because it's Table 8
       0
18
      when you get there.
19
              Okay. You know, I'll look at the screen
       Α
20
      for now. I've -- my -- as you can see, mine --
21
      I'm -- oh, I found it. Sorry. I placed it
22
      someplace else. 1 -- 126, okay.
23
       Q
              Yup.
24
       Α
                     Yes, I'm there.
25
                     So if you imagine the finder of
       Q
              Okay.
```

1	UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF CALIFORNIA
2	Wordington District of Charles of Charles
3	IN RE:
4	) Case No. TESLA, INC., SECURITIES ) 18-cv-04865-EMC
5	LITIGATION )
6	REPORTER'S CERTIFICATION
7	REMOTE VIDEOTAPED DEPOSITION OF MICHAEL HARTZMARK
8	March 18, 2022
9	I, Rebecca A. Graziano, Certified Shorthand
10	Reporter in and for the States of Texas,
11	California, and Illinois, hereby certify to the
12	following:
13	That the witness, MICHAEL HARTZMARK, was
14	duly sworn and that the transcript of the oral
15	deposition is a true record of the testimony given
16	by the witness;
17	I further certify that pursuant to FRCP Rule
18	30(f)(1) that the signature of the deponent:
19	was requested by the deponent or a
20	party before the completion of the deposition and
21	returned within 30 days from date of receipt of
22	the transcript. If returned, the attached Changes
23	and Signature Page contains any changes and the
24	reasons therefor.
25	was not requested by the deponent or a

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party before the completion of the deposition.

I further certify that I am neither attorney nor counsel for, related to, nor employed by any of the parties to the action in which this testimony was taken.

Further, I am not a relative or employee of any attorney of record in this cause, nor do I have a financial interest in the action.

Certified on March 20, 2022



Rebecca A. Graziano, CSR, RMR, CRR

Texas CSR 9306

Expiration: 07/31/22 California CSR 14407 Expiration: 09/30/22 Illinois CSR 084.004659 Expiration: 05/31/23

2324

25

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# Exhibit H

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Page 1
 1
                  UNITED STATES DISTRICT COURT
 2
           FOR THE NORTHERN DISTRICT OF CALIFORNIA
                     SAN FRANCISCO DIVISION
 4
 5
    IN RE TESLA, INC.,
 6
    SECURITIES LITIGATION
                                )Civil Action No.
 7
                                )3:18-cv-04865-EMC
 8
 9
10
11
12
                    * C O N F I D E N T I A L *
13
14
15
        REMOTE VIDEOTAPED DEPOSITION OF DANIEL FISCHEL
16
                     Monday, March 28, 2022
                       Chicago, Illinois
17
18
19
20
21
22
23
   Reported By: TRICIA J. LATHOURIS, CSR, RPR
24 JOB NO. 208865
25
```

Page 13 has for market efficiency. 1 2. Okay. And that's in connection with Tesla 3 notes, correct? 4 Α Correct. 5 All right. What about Tesla options? you plan to offer any opinions regarding the market 6 7 for Tesla options? MR. BERNSTEIN: Objection to form. 8 9 I certainly plan to talk about the market Α 10 for Tesla options. BY MR. PORRITT: 11 12 Q Let me -- let me ask a better question, 13 then. 14 Α Yes. 15 0 Sorry. If I may. 16 So do you plan to offer any opinion 17 regarding the efficiency -- the informational efficiency of the market for Tesla options from 18 19 August 7th, 2018 through August 17th, 2018? 20 MR. BERNSTEIN: Objection. Form. 21 I -- I think I would offer the opinion that 22 because there's -- Dr. Hartzmark did not provide an 23 event study for Tesla options, there's no 24 demonstration in his analysis of whether or not 25 Tesla options satisfied the most basic criteria for

- 1 demonstrating the existence of an efficient market.
- 2 So I certainly would plan to say that, if asked.
- 3 And I think there are a number of basic
- 4 methodological flaws with much of Dr. Martz --
- 5 Dr. Hartzmark's analysis.
- But certainly in connection with options, I
- 7 think basic methodological error to analyze
- 8 potential inflation in connection with options
- 9 without following the standard approach of
- 10 conducting an event study.
- 11 BY MR. PORRITT:
- 12 Q In the context of market efficiency, are
- 13 you aware of -- that Dr. Hartzmark did an analysis
- 14 of the efficiency of the market for Tesla options in
- 15 his report dated September 22, 2020?
- 16 That's Exhibit 1.
- 17 A Well, I don't have that in front of me, so
- 18 you'll have to show it to me.
- 19 Q So your testimony two questions ago was
- 20 discussing the analysis in Dr. Hartzmark's damages
- 21 report, correct?
- 22 A That's correct.
- 23 Q Okay. So you were not commenting on any
- 24 analysis done on the market efficiency of options in
- 25 Dr. Hartzmark's class certification report, Exhibit

- 1 MR. BERNSTEIN: Objection to form.
- 2 A No -- no, it wouldn't.
- 3 BY MR. PORRITT:
- 4 Q Why not?
- 5 A Because it wouldn't. Because it would not
- 6 demonstrate to me that any of the economic evidence
- 7 in connection with the price reaction on August 7th
- 8 -- if I made that assumption, it wouldn't change my
- 9 opinion that there's -- based on the economic
- 10 evidence that I've reviewed in my analysis and
- 11 review of Dr. Hartzmark's opinions and conclusions,
- 12 there's no basis to conclude that any of that price
- 13 reaction was the product of a price increase
- 14 attributable to a materially false and misleading
- 15 statement.
- 16 BY MR. PORRITT:
- 17 Q Well, this Section 3 isn't talking about
- 18 price reaction, is it?
- 19 A I'm sorry?
- 20 O This Section 3 in Exhibit 378 is not
- 21 talking about price reaction, is it?
- MR. BERNSTEIN: Objection. Form.
- 23 A I'm -- I'm not sure what you're talking --
- 24 I don't know what you're referring to.
- 25 BY MR. PORRITT:

- 1 transaction where such a structure has been
- 2 implemented, correct?
- 3 A I'm not aware of any other one, although I
- 4 haven't researched that question. But, again,
- 5 that's because in the typical going-private
- 6 transaction, the buyer, as a result of the
- 7 going-private transaction, is the beneficiary of
- 8 future increases in value.
- 9 In this proposed going-private transaction,
- 10 what Mr. Musk was attempting to do, based on what he
- 11 announced, was not to be a buyer himself, not to
- 12 increase his own ownership stake, but, rather, to
- 13 protect the public investors who shared in his
- 14 vision.
- 15 That concern for existing public investors,
- 16 that really was the hallmark of this particular
- 17 proposed structure that Mr. Musk was considering.
- 18 And his concern about the need to make sure that if
- 19 he could successfully implement his vision, as he
- 20 certainly has so far, that all of the existing
- 21 public shareholders who believed in him and believed
- 22 in his vision would be able to share in the gains in
- 23 ways that would not be possible in a more
- 24 traditional going-private structure.
- 25 Q And for purposes of your opinion, you just

- 1 assumed that that structure was feasible?
- 2 MR. BERNSTEIN: Objection to form.
- 3 A I didn't make any assumption about that one
- 4 way or the other.
- 5 BY MR. PORRITT:
- 6 Q And to be clear, you've not -- you haven't
- 7 seen any documents in this case providing more
- 8 details regarding the structure suggested by
- 9 Mr. Musk, correct?
- 10 MR. BERNSTEIN: Objection to form.
- 11 A Well, I haven't looked for any, so I don't
- 12 recall whether I've seen any or reviewed any. But
- 13 as I said, my focus has been on the public
- 14 statements by Mr. Musk, the board and various
- 15 different categories of market participants,
- 16 analysts and the press.
- 17 BY MR. PORRITT:
- 18 Q Now, regarding the public statements of
- 19 Mr. Musk during the class period, are you offering
- 20 any opinion regarding the materiality of any of
- 21 those statements?
- MR. BERNSTEIN: Objection to form.
- 23 A Well, I think I've already said that the --
- 24 the August 7th and the other disclosures on August
- 25 7th, following the tweet but during trading hours,

- 1 those statements collectively were clearly material
- 2 in terms of the price increase that resulted.
- I believe, if I remember correctly, that
- 4 Dr. Hartzmark found that the New York Times story on
- 5 August 17th also had a statistically significant
- 6 reaction, and I believe that's correct. And if I
- 7 remember correctly, in Dr. Hartzmark's event study,
- 8 he didn't find any other day to be statistically
- 9 significant, I -- if I -- recollection that he had
- 10 some intra-day results that -- where he might have
- 11 found statistic -- statistical significance.
- But as I said, for my purposes, I don't --
- 13 I don't really have any dispute with Dr. Hartzmark's
- 14 statistical findings as opposed to the
- 15 interpretation of those findings.
- 16 BY MR. PORRITT:
- 17 Q Is a statistically significant price
- 18 reaction necessary before any statement or piece of
- 19 information can be considered material?
- 20 MR. BERNSTEIN: Objection to form.
- 21 A I -- I think that really depends on the
- 22 relevant facts and circumstances.
- 23 BY MR. PORRITT:
- Q Well, if it depends on the relevant facts
- 25 and circumstances, that suggests the statistical

- 1 significance is not required before a statement can
- 2 be considered material, correct?
- 3 MR. BERNSTEIN: Objection to form.
- 4 A You just have to be a little bit more
- 5 specific in what situation you're positing.
- 6 BY MR. PORRITT:
- 7 Q Do you have an opinion -- do you have an
- 8 opinion whether the August 13th blog post, which did
- 9 not have any statistically significant price
- 10 reaction on the day -- on the trading day following
- 11 its publication, whether that blog post was material
- 12 or immaterial in this case?
- 13 A I think what you can say is that the
- 14 information in that blog post did not result in a
- 15 statistically significant price reaction.
- 16 Q Okay. Do you have an opinion whether the
- 17 information in that blog post was material or not?
- 18 A Well, to answer that question, you -- you'd
- 19 have to look at, not the blog post itself, but the
- 20 -- if I understood your question correctly, the
- 21 information contained in that blog post.
- 22 Q Right. And you'd have to compare it to the
- 23 total mix of information then available to the
- 24 market; is that correct?
- 25 MR. BERNSTEIN: Objection --

- 1 A Yes. And all the other -- as you said, all
- 2 the other information that was coming out over, you
- 3 know, whatever period of time that you are looking
- 4 at.
- 5 BY MR. PORRITT:
- 6 Q All right. And my question is: Have you
- 7 done that in this case?
- 8 A You know, it's a hard question to answer.
- 9 I -- I believe that the -- as -- as I've said, the
- 10 proposed structure that Mr. Musk was considering,
- 11 that he said there was no final decision reached
- 12 about, was innovative. And there was a lot of
- 13 commentary over the next few days about that
- 14 structure and different components of that
- 15 structure.
- And so I -- I guess I would say if I had to
- 17 think about materiality, I would say all of that
- 18 information about the proposal itself that Mr. Musk
- 19 was considering and then the analysis of that
- 20 proposal over time, you know, I would say all of
- 21 that was material in the sense that, taken together,
- 22 that was material information to investors whether
- 23 the -- both the initial idea that Mr. Musk was
- 24 considering, and then the analysis of that idea by
- 25 market participants.

- 1 Tesla stock for this matter -- what would that look
- 2 like?
- 3 A Well, first of all, I didn't exactly say
- 4 that. You know, what I said was, there's no
- 5 economic evidence that a different disclosure would
- 6 have resulted in a different stock price. And in
- 7 terms of hypotheticals, because there wasn't a
- 8 different disclosure so we don't -- can't say --
- 9 can't do a precise test of what would have occurred,
- 10 but hypothetically, given the speculation about
- 11 funding sources subsequent to August 7th, had there
- 12 been a more detailed disclosure about what Mr. Musk
- 13 meant about all the different possible funding
- 14 sources, it's just as likely that that disclosure
- 15 would have had the same effect, or even a more
- 16 positive effect, than the actual disclosure that
- 17 was, in effect, made.
- And certainly, Dr. Hartzmark presents no
- 19 evidence that there was ever any corrective
- 20 disclosure about funding that caused the stock price
- 21 to decline.
- Q What's your basis for your opinion that
- 23 different disclosures may have had any more positive
- 24 effect on Tesla's stock price?
- 25 A Again, it's a hypothetical because it never

- 1 occurred in the real world. And, again, my focus is
- 2 on Dr. Hartzmark provides no basis for concluding
- 3 that a different -- that that disclosure, as opposed
- 4 to a different disclosure, would have had any
- 5 different effect on Tesla's stock price in terms of
- 6 its increase on August 7th. And that being one of
- 7 the basic flaws in his conclusion.
- But, again, speaking hypothetically, in
- 9 light of all the speculation in the analyst reports
- 10 about what exactly Mr. Musk was referring to when he
- 11 said funding secured in a transaction that he was
- 12 considering, if all the information that eventually
- 13 came out about what he was considering when he made
- 14 that statement, if that was in the August 7th
- 15 disclosure, there's no basis. And certainly,
- 16 Mr. Hart -- Dr. Hartzmark presents no basis for
- 17 showing that that alternative hypothetical
- 18 disclosure would have had any different effect. Or
- 19 for that matter, wouldn't have had a more positive
- 20 effect than the actual disclosure, which occurred on
- 21 August 7th.
- 22 You don't think that the mark -- the
- 23 analyst discussing all funding secured evidences its
- 24 materiality and impact on stock price?
- 25 MR. BERNSTEIN: Objection to form.

- 1 A I think the entire statement certainly was
- 2 material in the way that many truthful statements
- 3 about possible corporate control transactions are
- 4 typically material. I believe that. And I'm not
- 5 sure if that's responsive to your question.
- 6 BY MR. PORRITT:
- 7 Q Well, have you reviewed the media reaction
- 8 to the tweets on August 7th?
- 9 A Yes, in detail, I have.
- 10 Q Okay. And reviewed the analyst reports
- 11 that were published on August 7th and August 8th
- 12 immediately following the tweets?
- 13 A Yes. And I discuss a lot of them in my
- 14 report.
- 15 Q Is it fair to say that some of those
- 16 analysts placed reliance on the statement "funding
- 17 secured"?
- 18 MR. BERNSTEIN: Objection to form.
- 19 A You know, again, I -- it's -- I think you
- 20 have to be a little bit more specific. You know, I
- 21 think the reality is -- and I discuss this in my
- 22 reports -- the price reaction to the announcement;
- 23 price rose from approximately \$356 to \$379 in
- 24 response to a transaction that Mr. Musk was
- 25 considering at \$420. So there was a lot of

- 1 as the finder of fact.
- 2 Q All right. When you offer damages
- 3 methodology, do you offer an opinion that statements
- 4 were false?
- 5 A You offer an opinion as to whether
- 6 statements are value-relevant by demonstrating the
- 7 difference that those statements made relative to
- 8 what would have been the case had the statements not
- 9 been made -- not -- not been false.
- 10 Q What's the difference between
- 11 value-relevant and material?
- 12 A Well, the reason I use value-relevant is,
- 13 it's an economic definition of materiality, as I've
- 14 stated in my academic writing, as well as my
- 15 previous testimony, to avoid expressing a legal
- 16 conclusion.
- 17 Q And, Professor, Dr. Hartzmark in his
- 18 Appendix 14 to his report, analyzes the impact of
- 19 various -- of the daily news articles -- I think
- 20 there's almost 2,400 of them -- on the price of
- 21 Tesla stock observed during the class period.
- That's not evidence in your mind?
- 23 MR. BERNSTEIN: Objection to form.
- 24 A It's -- it's not evidence demonstrating
- 25 that those statements produced inflation because

- 1 there's no demonstration that those statements led
- 2 to a price path that would have been any different
- 3 had all those statements been accurate.
- 4 BY MR. PORRITT:
- 5 Q So if -- and --
- 6 A By the way, when I -- excuse me. Let me
- 7 just clarify my answer.
- 8 I'm not suggesting that they weren't
- 9 accurate. I'm just saying that an economic damage
- 10 analysis has to distinguish between truthful -- the
- 11 effects of truthful information versus the effects
- 12 of false information in terms of their economic
- 13 effects, not the factual issue whether they were
- 14 true or false. You have to demonstrate that there's
- 15 a difference.
- 16 That's what artificial inflation means.
- 17 You can't just assume the jury will find the
- 18 statements false and, therefore, I'd assume that
- 19 thew price path is completely different from what it
- 20 would have been had the statements been true.
- 21 Q And Dr. Hartzmark --
- 22 THE REPORTER: I'm sorry. I didn't hear
- 23 you, sir.
- 24 MR. PORRITT: All right.
- 25 BY MR. PORRITT:

Page 238 I further certify that this certificate applies to the original signed IN BLUE and certified transcripts only. I assume no responsibility for the accuracy of any reproduced copies not made under my control or direction. Dated: March 30,2022 Succes Authouris TRICIA J. LATHOURIS, CSR, RPR My Commission Expires: March 8, 2023 

# Exhibit I

### UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF CALIFORNIA

> San Francisco, California June 16, 2022

# BEFORE: THE HONORABLE EDWARD M. CHEN REPORTER'S TRANSCRIPT OF PROCEEDINGS VIA ZOOM PLATFORM MOTION FOR CERTIFICATE OF APPEALABILITY

Official Court Reporter:
Teri Veres, RMR, CRR
Sandra Day O'Connor U.S. Courthouse, Suite 312
401 West Washington Street, Spc. 38
Phoenix, Arizona 85003-2151
(602) 322-7251

Proceedings Reported by Stenographic Court Reporter Transcript Prepared by Computer-Aided Transcription

1	APPEARANCES
2	(Appearing via Zoom platform)
3	For the Plaintiff:
4	LEVI & KORSINSKY, LLP By: Nicholas Porritt, Esq.
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7	Washington, D.C. 20007
8	For the Defendant Tesla:
9	QUINN EMANUEL URQUHART and SULLIVAN, LLP By: Kathleen Sullivan, Esq.
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#### 1 PROCEEDINGS 2 (The proceedings started at 1:28 p.m.) 3 COURTROOM DEPUTY: These proceedings are being recorded by this court. Any other recording of this 4 5 proceeding either by video, audio, including screen shots or 6 any copying of the hearing is strictly prohibited. 7 This Court is now in session. The Honorable Edward 8 M. Chen presiding. Court is calling the case In Regarding 9 Tesla, Inc., Securities Litigation. 10 Counsel, please state your appearance for the 11 record, beginning with the plaintiff. 12 MR. PORRITT: Good afternoon, Your Honor, Nicholas 13 Porritt of the firm Levi & Korsinsky on behalf of the 14 plaintiff and the class. With me are Adam Apton and Adam 15 McCall, also of Levi & Korsinsky. 16 THE COURT: All right. Good afternoon, Mr. Porritt. 17 MR. PORRITT: Good afternoon, Your Honor. 18 MS. SULLIVAN: And for the defendant good afternoon, Your Honor, this is Kathleen Sullivan for Tesla. 19 20 THE COURT: All right. Thank you, Ms. Sullivan, 21 good afternoon. 2.2 MS. SULLIVAN: Good afternoon, your Honor. 23 THE COURT: Okay. So this is Tesla's motion to 24 reconsider my summary judgment order, particularly on the

question about materiality and whether I had found materiality

25

2.2

for some purposes and not others, as I understand the argument, and that there's inconsistency to assume or for me, if I did, find materiality with respect to falsity and scienter, because each of those requires that the defendant made a material misrepresentation or omission, and not to find materiality because I only assumed arguendo that -- in the reliance -- on the reliance question.

And maybe -- maybe the answer is clarity here if I didn't make it clear. When I look back at my order and it seems evident to me, maybe I didn't make it clear enough, that all that I found with respect to falsity was that no reasonable juror could find the statement, for instance, "funding secured" accurate and not misleading.

So I was only talking about falsely in the literal sense that it was not accurate. It was inaccurate or misleading, not that that inaccuracy or misleading was material. So the false -- so the falsity element that's required for a 10b-5 is not -- has not been completely fulfilled, but obviously one component that it was a false statement within, let's say in a literal sense, not in a legal sense; and similarly with scienter, no reasonable juror could find that Mr. Musk did not know or didn't act in disregard to the inaccuracy -- the factual inaccuracy, not the legal.

And so I didn't -- and that's why I did not find -- when we got to looking at the reliance question, I did not

2.2

find that there was a predicate of materiality under the fraud-on-the-market doctrine. I only looked to even if there were, they were factual questions so there's actual reliance.

So that's what I intended, and so once I've laid that out it seems to me that there is not an inconsistency there. To be clear, I did not find materiality with respect to the misrepresentation or a reckless disregard or knowingly scienter with regard to any such material representation.

I'll let the parties comment. But, I mean, that's what I intended and I think that's what I said; but if you have further comments, I'll take those.

MS. SULLIVAN: Well, Your Honor, if I may begin for Tesla?

THE COURT: Yeah.

MS. SULLIVAN: Well, first of all, thank you very much, Your Honor, for that clarification and Tesla, of course, believes that Your Honor was completely correct in the holding that the reliance element must go to the jury, can't be decided as a matter of law because there are triable issues of fact with respect to price impact; and if there wasn't any ability to move the market on the price, then there would not be materiality for purposes of Goliath on the fraud-on-the-market theory. So to begin with your reliance ruling, your Honor, we think it's completely correct.

Your Honor's clarification is very helpful because

falsity is -- excuse me. 1 Sorry, Your Honor, for that. 2 3 THE COURT: Normally I confiscate your phone, but I 4 can't do that over the Internet so. . 5 MS. SULLIVAN: Your Honor, we were just trying to 6 make sure that you could hear me, and I take it there are no 7 tech issues? 8 THE COURT: No, we can hear you fine. 9 Thank you, Your Honor. MS. SULLIVAN: 10 So, Judge, the clarification, Your Honor, that Your 11 Honor was not deciding materiality as a matter of law as to 12 any of the three elements at issue on the summary judgment 13 motion, falsity, scienter, or reliance is very helpful and we 14 did ask for that as alternative relief, Your Honor; but if I 15 could, Your Honor, may I just say why we think that's not an 16 entire fix here? 17 THE COURT: Sure. 18 That is because the falsity and MS. SULLIVAN: scienter -- you can't disaggregate the falsity of the 19 20 statement from its material falsity, and we think it's legally 21 impossible to disaggregate the scienter toward a materially 2.2 misleading statement from its materiality. 23 So, in other words, it's not quite enough to say 24 well, I'm going to send abstract falsity -- I'm going to take

abstract falsity away from the jury but let the jury decide

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2.2

whether it was a material false statement, a statement that would alter the mix of information for investors in the marketplace in a way that mattered to them; and it's not quite enough to take scienter away from the jury because, again, falsity and scienter as a -- each as a whole incorporate materiality as a necessary predicate.

So, Your Honor, maybe I can use the metaphor of it's a coin, and falsity has a materiality requirement that's built into it. You can't carve the coin in half. You have to let falsity go to the jury in its entirely.

THE COURT: Well, why is that? Why is that,

Ms. Sullivan? You can have something that's false. There is such thing as something that's false or true, right,

literally; but it could be not material, I mean -- and that's exactly what we have here.

It was -- I found it was false to say "funding secured," but it may well be that the average, reasonable investor cared more about the 420 and the fact of going private, the fact -- you know, all the things that go with it rather -- and didn't care that much. I mean, I don't know if that's -- one would argue, you know, that's -- it's pretty important, therefore, it would be objectively material; but you could have a false statement that's kind of insignificant.

MS. SULLIVAN: Well, Your Honor, we think that the

So why can't you carve that up into two?

2.2

garning precedent requires -- and we've cited it in detail in the briefing, Your Honor, but, you know, if you look at Dura, Matrixx, the original basic decision, if you look at Amgen, Halliburton and Goldman Sachs, if you look at all of the decisions that treat materiality as baked into falsity, materiality is baked into scienter and, of course, as Your Honor correctly decided, materiality is baked into reliance, meaning baked into price impact in a fraud-on-the-market case, then, Your Honor, with respect, we don't think you can take falsity and scienter away from the jury if materiality is in dispute as you now have -- as Your Honor has now correctly, I think, clarified it is in factual dispute. It is in triable dispute.

And that's because, Your Honor, materiality is a necessary prerequisite for a false statement. It isn't just any false statement that's reached by the securities laws.

It's only a material false statement, a statement that would alter the mix of information.

THE COURT: That's why I said it's not a done deal for 10b-5. The element of falsity and scienter have not been automatically fulfilled here because there's a component of that, but I do see it as -- you know, a jury's going to have to decide two things normally. Was it false in a literal sense -- I mean, because if it's accurate, you don't even get to materiality, right?

2.2

over, defendant wins; but if it's not accurate, they still have to decide, "Well, is that inaccuracy -- did it matter to the average -- to the reasonable" -- so it is a two-stage analysis in the ultimate analysis, and I'm saying stage one I find that it was inaccurate -- factually inaccurate. I know you disagree with that, but that's what I found; but it doesn't answer the question about materiality.

So falsity within the meaning of 10b-5 as a term of art has not been taken off the table. That's still -- there's still a component of that that's still live.

MS. SULLIVAN: Well, we -- we appreciate that very much, Your Honor, and that's a very helpful clarification; and it does enable us to go to the jury on whether the statement was materially -- the statements were materially false and to go to the jury on whether scienter was established as to a materially false statement.

That's helpful; but, Your Honor, we respectfully think that you can't direct the jury to find falsity or scienter halfway. We think it's one element -- one indivisible element in which you can't segregate the falsity from the materiality of the statement and you can't segregate, as a matter of law, the scienter from the intent with respect to the material misstatement because the securities laws are concerned only with deliberately or recklessly made material

false statements.

2.2

So, Your Honor, we believe there's still the risk of reversible error in directing the jury -- taking away from the jury the chance to decide falsity as a whole, scienter as a whole; and if that were to infect the trial -- of course, that was the reason we suggested interlocutory review as an alternative to Your Honor's reconsideration.

If that were to infect the trial such that the Circuit ultimately decided, well, falsity really had to go all the way to the jury, couldn't just go halfway to the jury, or scienter had to go all the way to the jury, it couldn't just go halfway to the jury, if that were to prove reversible error, we would be back in a situation I am sure no one, including Your Honor wants us to be in, and that would be facing a second trial after all the exertion that went in to the first one.

So, Your Honor, I think that's the key point, is that falsity and scienter are not divisible elements with two steps. They're single elements in which materiality is a necessary prerequisite for the finding; and because Your Honor correctly found materiality to be in dispute for reliance, it's also in dispute for falsity and scienter, but that means the whole element of falsity and scienter is in dispute.

THE COURT: All right.

Mr. Porritt or I'm not sure if it's Mr. Apton or

Mr. McCall want to respond.

2.2

MR. PORRITT: Thank you, your Honor.

So my initial reaction is this debate is somewhat trivial in the sense that there's no dispute that the -- what was said in the tweets were material. I mean, everyone agrees. Plaintiff agrees, defendant's expert agrees.

So this whole debate about being able to argue -they're gonna argue to the jury that the over seven tweets
were immaterial at the time they were made is completely
hypothetical because, no, they won't because there's no
evidence.

THE COURT: I didn't find that. If you look in my opinion, I didn't make that finding. I understand the argument that the defendant's own expert referred to it as material; but, of course, the comeback to that was, well, you looked at the price for -- after the partial correction. You didn't see any movement at all, and you would have expected something.

There were several things going on. I think I made a -- maybe in the context of reliance that it may be that the thing that moved the price initially was the announcement -- the big announcement was, "We're going private. I'm going to take it private" and "420."

So I'm not going to reargue this because you didn't move for reconsideration, but I'm telling you I did not find

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-- and maybe you think I should have found -- but I did not find -- and I searched. I re-read my order several times. I did not say that this was material. I just said it was inaccurate and misleading.

MR. PORRITT: Understood and we would agree. We obviously didn't seek reconsideration on that point; and, as I said, I just don't think -- I think it's sort of an academic debate now because I think the evidence -- there is no evidence that is to immaterial and even the -- the parts -- it has to be assessed at the time it was made.

So on August 7th the materiality is so -- it's so overwhelming in this case that -- and that their own expert doesn't even offer an opinion that it was immaterial. So there is nothing in the record to suggest it was immaterial.

So we're happy to take that issue to the jury. The jury will presumably decide based on the evidence in court that it was immaterial, because there really is no other conclusion it can reach; but Your Honor didn't feel like it -- you were able to get to there on the summary judgment order and that's fine. You know, we'll accept that.

So -- and then for the purposes of -- you did not find that reliance was an issue, I don't believe, for the purposes of -- or materiality was an issue in terms of reliance. You assumed -- according to the order, you assumed materiality for the purposes of establishing a presumption.

2.2

You established there was a -- as far as I understand the ruling, there was a issue of material fact as to whether defendants could rebut the presumption, which means --

THE COURT: Yeah, which is factual reliance, right.

MR. PORRITT: So -- which means you have to completely sever the effect of the misrepresentation, or what's in the tweet, from the stock price at a particular point in time.

I mean, that's -- so materiality -- whether you view it as materiality, that's really the same inquiry as kind of loss causation. You say she's saying that the loss causation is now diminished down to zero, so it has a zero impact is really what you're arguing in that particular inquiry.

THE COURT: What's your response to Ms. Sullivan's point that -- even on the point of inaccuracy, what I call falsity, kind of a literal sense, not a legal sense, I can't really do that. I can't separate that from materiality. It's improper for the Court to say, "Well, I do find it was inaccurate. That leaves the question whether it was materially inaccurate."

MR. PORRITT: Yeah, I would say Your Honor is absolutely correct. Courts do that all the time. You can take a very classic example, which is in a restatement case, for instance, the county restatement, where people misstate

2.2

revenues. That's -- their prior revenue was false. It was in error. They corrected it. They might correct it six months later.

Lots of Courts at motion to dismiss level say, yes, but the chain was so immaterial that I'm gonna -- you know, we're gonna deny -- you know, we're gonna grant a motion to dismiss and dismiss the claim at that particular point in time. So it's just not true that you can't -- that they are so interwoven you can't decide one without the other.

So that would be my response.

THE COURT: All right. That's a pretty simple, clear-cut response. Ms. Sullivan, what's wrong with that? Take a numbers statement that's simply wrong. That can be inaccurate, but it may not be material.

MS. SULLIVAN: Your Honor, the question of falsity and scienter are for the jury. It isn't the truth -- Courts do this all the time, as Your Honor well knows. Summary judgment for defendants is common in securities class actions, but summary judgment for plaintiffs which take the issue of falsity and scienter away from the jury are quite uncommon.

In fact, my friend on the other side I don't believe can cite -- or has cited a single case in which falsity and scienter were taken away from the jury; and, Your Honor, I think the main point is that falsity must -- falsity must be material and it's the jury's province to decide whether a

2.2

reasonable investor would have found that the false statement altered the mix of information on which that investor decided to buy or sell or hold the security.

So it's the jury's decision whether the false statement was a material false statement that is a single inquiry and it must be done as a whole by one decision maker, and that should be the finding -- finder of fact here, which would be the jury.

So, Your Honor, I see the logic in Your Honor's point but, unfortunately, I think it's a legally unacceptable thing to disaggregate falsity from materiality, send one to the jury and one not or to disaggregate scienter from materiality.

In fact, I don't know of any decision that disaggregates the elements. The cases we cite all discuss falsity as requiring materiality, scienter as requiring materiality, and if there's no falsity -- no material falsity, Your Honor, we wouldn't even get to the scienter question.

So the real point here, Your Honor, is that we've got to be sort of all in or all out of jury determination here. I -- I appreciate Your Honor's clarification very much that Your Honor is allowing materiality to go to the jury, but we fear that that might become a reversible error down the line and it would be far better to simply reconsider and send the issues of falsity and scienter in their entirety to the

2.2

jury because -- to put it another way, Your Honor, there's kind of no such thing as an immaterial false statement in securities law.

The securities law is not a requirement of literal truthfulness. It's a requirement of material truthfulness in the market and, therefore, to disaggregate the question and carve it up into one issue for the Court to decide and one half for the jury to decide, we respectfully submit it's a potentially reversible error that the Court need not wade into at this point and if Your Honor thinks -- I actually think it's a new question of first impression, the idea that you can separately decide technical falsity as a matter of law, but allow materiality when the facts are disputed and triable to go to the jury.

That almost raises a new legal question of first impression, Your Honor. So certification to the Ninth Circuit might be an option if Your Honor is choosing to clarify part way but not reconsider all the way the falsity and scienter determination.

THE COURT: Well, let's talk about the certification or 1292(b). Normally you need to show a substantial ground for difference of opinion, not just that something is novel.

Maybe there's grounds if it's completely novel, but I'm not familiar with any case that says a Court is barred from taking certain other fact -- otherwise factual questions away from

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the jury when it's so clear that no reasonable jury could find on a particular fact.

It's not unusual for a Court to -- or party to move for partial summary adjudication and say, well, all right, we don't win the whole ball of wax. We're not going to get rid of the whole cause of action, but Elements 2 and 3 or Facts X and Y we want, you know, found and so -- and to so instruct the jury. We do that all the time.

If it is so clear -- now you may disagree, but if it is so clear that something cannot be found by a reasonable juror in any other way, I don't -- I know of no law that says "Well, you still have to go to trial -- unless you do the whole ball of wax, you still have to send everything to the jury even if certain elements are very clear."

I don't know why you're forced to -- the Court would be barred from disaggregating certain facts, making findings, and that's what partial summary adjudication is about.

MR. PORRITT: And, Your Honor, if I may address that point and also the prior point made by my friend,

Ms. Sullivan. The Ninth Circuit in Monroe v. Hughes, case from 1994, said quite clearly the elements of a 10b-5 claim involve a false statement. That such statement or omission was material. That's factor two. Three, reliance. Four, active scienter or intent to defraud.

So -- and in Provenz v. Miller, 102 F.3rd 1478, you

2.2

know, they identified materiality as a second element of Rule 10b-5. *Monroe v. Hughes* is 31 F.3d 772.

So other Courts -- and as we talked about in the context of -- you know, in accounting cases and motions to dismiss statements are assessed -- false statements are assessed with materiality all the time. That's not a -- that's not an unusual inquiry. So there's nothing novel about what Your Honor did here.

So with respect, my friend, Ms. Sullivan, is just incorrect in saying this is novel or that she's never heard of or cannot find a case where this is being considered separately as a separate element.

And on the question of certification for appeal, I think Your Honor is absolutely right. This is the very definition of what would be considered a piecemeal appeal. I mean, the Section 1292 jurisprudence says very clearly that, you know, cases that involve a -- you know, application of law to the detailed facts involved in the case, as exactly what Your Honor did in the summary judgment motion, are particularly ill suited for 1292 certification.

So here I don't think there's any -- there's no -- I don't think there's -- your order gets anywhere close to meeting the 1292 requirement for certification of appealability, your Honor.

THE COURT: All right. Ms. Sullivan, I'll give you

the last word and then I'm going to move on.

2.2

MS. SULLIVAN: Your Honor, just to be clear, I want to make sure I understand Your Honor.

You're clarifying that we may go to the jury on materiality for purposes of falsity element, materiality for purposes of the scienter element, and materiality for purposes of the reliance element, that materiality is in play as to all three?

THE COURT: It is right now. Now, if something happens, there's a summary judgment motion or some other kind of in limine motion later that makes it so clear that even that doesn't go to the jury, so I'm not saying -- but I'm saying as of right now those are jury issues. Those are factual issues.

MS. SULLIVAN: Understood, Your Honor, and we -- we very much appreciate that. Let me just take one last try, Your Honor, at why we think you should go one step further and send falsity and scienter in their entirety to the jury; and the reason is, this is not like a motion for summary adjudication where you rule on one claim and not another claim or one element or not another element.

Our main argument here is materiality is an inextricable, necessary prerequisite for a securities violation falsity. It's a necessary, inextricable sub element of scienter; and so, Your Honor, you wouldn't be carving out

an element and sending the element to the jury.

2.2

The legal error, which may prove problematic ultimately on appeal, is separating out a sub element or a component of an element and dividing the element into two parts and sending one piece to the jury and one -- and keeping one piece away from the jury.

We think it creates confusion and taints the ultimate verdict if the Court is essentially directing the jury on technical falsity and technical recklessness even though falsity and scienter can exist only if it was falsity with respect to a material misstatement.

So, Your Honor, we respectfully would urge you to just go one step further, let falsity and scienter go to the jury in its entirety. We also appreciate that Your Honor has clarified that materiality is in play for all three issues.

THE COURT: All right. Thank you, counsel.

My original order stands. To the extent that there's any ambiguity, I will make doubly clear now that I did not make any finding that the inaccuracy, which I found as a matter of law that was made in the three instances and scienter -- and finding scienter in regard thereto, I did not make any finding about materiality of the inaccuracy or we call it falsity, inaccuracy, misleadingness.

That is still an element and it's the same element
-- materiality informs all three factors, all three elements:

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reliance, scienter and falsity. That's still a question at
1
2
    this point for the jury.
              The only thing I'm taking away from the jury is the
 3
 4
    inaccuracy of the statements and whether or not -- and I think
5
    -- you know, I think that is the proper thing to do since I
6
    found that no reasonable juror could find otherwise and I
7
    don't see a -- any basis for granting a 1292(b) petition for
8
    interlocutory appeal.
9
              I really made a factual finding, not a legal
10
    finding; and in any event even if it's deemed a legal finding
11
    -- the question is -- legal question whether I can
12
    disaggregate in the way that Ms. Sullivan says I shouldn't, I
13
    find there's no quote "substantial ground" for difference of
14
    an opinion on that particular and therefore -- and I don't
15
    think it's going to materially advance termination of this
16
    litigation.
17
              So I'm denying the request for a 1292(b), and I
    guess I'm denying the motion for leave for reconsideration
18
    because I -- but I am issuing this clarification for that
19
20
              So there you have it, thank you.
    purpose.
21
                             Thank you, your Honor.
              MS. SULLIVAN:
2.2
              THE COURT: Thank you everyone.
23
              MR. PORRITT: Thank you, your Honor.
              THE COURT:
24
                          Thanks.
25
    (Proceedings ended at 1:55 p.m.)
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### REPORTER'S CERTIFICATION I, TERI VERES, do hereby certify that I am duly appointed and qualified to act as Official Court Reporter for the United States District Court for the District of Arizona. I FURTHER CERTIFY that the foregoing pages constitute a full, true, and accurate transcript of all of that portion of the proceedings contained herein, had in the above-entitled cause on the date specified therein, and that said transcript was prepared under my direction and control. DATED at Phoenix, Arizona, this 21st of June, 2022. s/Teri Veres TERI VERES, RMR, CRR

# Exhibit J

		Page 1
1	UNITED STATES DISTRICT COURT	
2	FOR THE NORTHERN DISTRICT OF CALIFORNIA	
3	SAN FRANCISCO DIVISION	-×
4	In Re:	
5	TESLA, INC. Civil Action No. 3:18-cv-04865-EMC	
6	SECURITIES LITIGATION	
7		-x
8		
9	* * * C O N F I D E N T I A L * * *	
10		
11		
12		
13	CONFIDENTIAL REMOTE VIDEOTAPED DEPOSITION OF	
14	SAM TELLER	
15	Roberts Creek, British Columbia	
16	Wednesday, August 11, 2021	
17		
18		
19		
20		
21		
22	Reported by:	
23	THOMAS A. FERNICOLA, RPR	
24	JOB NO. 198117	
25		

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Page 130
                (Plaintiff's Exhibit 110, Document
 1
         Bates TESLA LITTLETON 00006319, was
 3
         marked for identification.)
               Do you see that?
 4
 5
         Α
               Yes.
 6
               If you will open that, I will
 7
     introduce it for the record.
 8
               MS. TRIPODI: Exhibit 110 is a
         document produced in native form with
 9
10
         Bates-stamped TESLA LITTLETON 00006319.
11
               With the cover page, it's a
12
         41-page document in Excel spreadsheet
13
         form.
14
               Yes, I have it open.
15
         Q
               Mr. Teller, do you have an
16
     understanding of what this spreadsheet
17
     shows?
18
         Α
               It appears to show a record of my
19
     text messages over some period of time on
     the 31st and 1st. And it looks like the
20
     time zones are UTC, so off by some number of
21
22
     hours.
23
               UTC, I believe, is seven hours
         0
24
     ahead of Pacific Standard Time. Does that
25
     sound about right?
```

Page 131 1 Α I think seven or eight, that sounds about right. 3 So looking at your text messages 0 here, looking specifically at the August 1 4 5 text messages, looking at these messages, do 6 you have a sense of when the meeting with 7 Yasir and the PIF began? 8 Sometime around, I quess, between 9 6:16 and 6:21, yes. 10 Specifically, are you looking at 11 the text messages that are from August 1 in 12 UTC time at 1:16 through 1:21? 13 Α Yes. Do you recall how everyone arrived 14 15 at the meeting? 16 Α Generally. The Freemont factory 17 it is fairly large, and the place where we were working in it is maybe a five-minute 18 19 walk from the main lobby, maybe a little 20 less depending on how fast you walk. And we 21 were out there doing whatever we were doing 22 beforehand having meetings. 23 So Reyna went to the lobby to 24 greet Yasir and Saad and/or the other 25 I don't remember exactly the person.

Page 132 1 consequence. 2. But Reyna walked Yasir plus one back to us in the factory, and I greeted 3 them outside. It was very friendly. I 4 5 shook Yasir's hand, gave Saad a hug. So I 6 quess it was Saad. So Saad first, and then 7 the other guy who came later. 8 And then we -- I don't remember if 9 they shook Elon's hand outside the room or 10 inside the room. Maybe Elon was already in 11 the room. But we went into the conference 12 room. And then a few minutes later, Reyna 13 brought the third Saudi member of the team 14 back, and he joined the meeting. 15 Do you recall who the third Saudi 16 member was? 17 I think it was Naif. He was new 18 to me. 19 How did the meeting begin? 20 Α The meeting began kind of like Yasir saying, "How is it going, Elon? 21 22 What's up?" 23 Unless I say otherwise, I'm 24 paraphrasing or conveying the gist of things because I don't have, again, a verbatim 25

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Page 133
 1
     recollection for the vast majority of these
     things.
 3
               But Yasir said something like,
     "How is it going, Elon? What's up? What's
 4
 5
     new?"
               Elon says, "Well, you know, we're
 6
 7
     just here in the factory building cars.
     It's been pretty rough."
 8
               And I actually -- I just remember
 9
     it because it was funny. I actually don't
10
     remember. We had like these Tesla
11
12
     securities hats. I don't know if you
13
     remember them. We had like Tesla's
14
     manufacturing sleeves.
15
               I think we probably looked pretty
     tired. We had been in there so -- and there
16
17
     was -- and it's in the middle of factory
     where, you know, even though there's a door,
18
     you can still hear, you know, a bit of,
19
20
     like, factory noise outside.
21
               So, I don't know, a little texture
22
     for the environment for you.
23
               And we were at a long -- just to,
24
     again, set the scene, we're at our long
25
     conference table. Yasir -- to his right was
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Page 134 Saad, I think. I think eventually Naif came 1 and sat his left. 3 Elon was facing Yasir. I was to Elon's right. Eventually, we can talk 4 5 about -- Deepak Ahuja came in and then sat 6 to Elon's left eventually. So that was the 7 setup. 8 Back to the conversation. Elon 9 gave an update. He said, "Well, we're deep 10 in production hell. Stuff is pretty crazy. 11 We're doing this but, you know, still really 12 optimistic about the future. "If we can get through this, 13 14 things should be really good, but man -- you 15 know, he said something to the effect of, 16 "Man, being a public company is like really 17 hard. It's a real pain in the ass." And Yasir replied with something 18 to the effect of, "Well, Elon, we are 19 20 interested in working with you to change that, you know, to take Tesla private, you 21 22 know, but then it kind of petered out. It 23 felt like nothing really happened." 24 And Elon replied something to the effect of, "Well, yes. You know, I got to 25

Page 135 1 say it was kind of unclear to me what was going on with you guys and SoftBank. I wasn't really crazy about Masa, if I'm being 3 4 honest. 5 "And it, to me, my impression was 6 that you guys were kind of joined at the 7 hip, and so," you know, dot, dot, "that's why -- maybe that's why we kind of 8 didn't move forward with a ton of 9 10 enthusiasm," something to that effect. 11 And Yasir said, "Listen, Masa is 12 my partner. We work on a lot of stuff together, and it's fun, but the PIF is not 13 14 SoftBank. SoftBank is not, you know, the 15 PIF. We're separate entities. You know, 16 like, I do my own thing," something like 17 that. And Elon was like, "Oh, okay. 18 That's interesting." 19 20 And Elon, I think, you know, asked 21 something like so -- I don't know if it was like, "How does it work?" Or, like, so --22 23 like, "Are you able to, like, speak on 24 behalf of the PIF? Are you able to, like, 25 make deals?"

Page 136 1 And Yasir replied with something, like, very clear along the lines of, "I'm the decisionmaker, " or, "I call the shots," 3 or dah, dah, dah, dah, dah. 4 5 You know, like, "I am here 6 speaking with authority," you know. 7 And it was somewhere in there -- I may be getting the sequence wrong, but I 8 9 actually think that I mis-sequenced it 10 slightly, because I think before they got 11 into that conversation which ended with "I 12 am the decisionmaker," I believe earlier in 13 the meeting, Yasir had said something like, "Well, we remain really big supporters, and 14 15 I actually want to let you know that we have 16 purchased a real significant, you know, just 17 below 5 percent stake in Tesla." You know, I'm just trying to 18 19 remember the sequence of those two things. 20 To be honest, I forget if that happened. If the decisionmaker thing happened, or if the 21 22 decisionmaker and then he did that. 23 But either way, the cumulative 24 effect of those things was a slight perk up, 25 and then a much, like, more serious perk up

Page 137 1 from Elon as he heard these facts. And Yasir shared that the PIF had 2 bought nearly 5 percent of Tesla. [1] 3 remember that Saad had a small iPad. 4 5 was kind of hard to see what was on it, but 6 he showed some charts or graphs. I don't 7 remember exactly what they showed, but they kind of basically -- the point was to 8 9 illustrate what Yasir was saying about their 10 stake in Tesla. 11 And Elon -- when Elon heard that 12 he said, "Wow, I mean, that's" -- something to the effect of, "Wow, that's amazing. I 13 14 really appreciate that. I had no idea. 15 That's fantastic, you know, really 16 impressive." 17 And I think it was at that point -- yes, it was at that point that I 18 19 texted Deepak and Martin Viecha, who --20 Deepak, the CFO, Martin Viecha, the head of investor relations, and I texted them, you 21 know, saying, "Hey." I have the text here. 22 23 Looking through your text message, 0 24 and I'm looking specifically at 8/1/2018. 25 1:23 UTC time --

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Page 138
 1
         Α
               Exactly.
 2.
         0
               -- where you say:
 3
               "Yasir, the Saudi PIF here says
     they own almost 5 percent of Tesla,"
 4
 5
     parentheses, question mark, exclamation
 6
     point.
 7
               Was Elon surprised by this news,
     to your understanding?
 8
 9
         Α
               Yes.
10
               Were you surprised by this?
         Q
11
               Yes.
         Α
12
         Q
               Then you say -- the next message
13
     is:
14
               "Feel free to come meet me in 15
15
     minutes and walk him out."
16
               Why did you send that?
17
               I'm just rereading the sequence of
18
     text messages here. And just to make sure I
19
     would cycle back, I do have further
20
     recollections of the meeting itself that I
     want to -- that will provide a more complete
21
22
     answer to the earlier question. But we can
23
     go here and then come back, if that works.
24
               But I texted Deepak to feel free
25
     to come meet me in 15 minutes and walk him
```

Page 139 1 out because I had learned that these guys were now a major investor in Tesla. 3 And as a prospective investor, a lot of people, you know, might want to meet 4 5 or whatever. The relationship isn't that 6 important, but saying, these guys own 7 5 percent of Tesla. Okay, Deepak, it's probably valuable for you to know them and 8 9 meet them. 10 And, Martin, I copied you. You're 11 the head of investor relations. You should 12 also have a relationship with these guys. 13 It wasn't like -- you can see from 14 my next text message, no pressure, but you 15 are welcome. You know, this wasn't, like, 16 essential. 17 In my mind, I said, okay, it would 18 be great if Deepak and Martin can meet them 19 Worst case scenario, I'll connect them now. 20 after this. Cool, great news. We have a 21 new major shareholder. 22 What happened after you texted 23 them about the 5 percent ownership interest? 24 Deepak replied, which we can see He said, "Will do. Not surprised. 25 here.

Page 140 1 We had heard from Goldman Sachs that a Saudi investor was buying our stock all the way to 3 5 percent." 4 So Deepak was not surprised, as he 5 Elon and I were not aware of this, says. 6 with the information that he says. And that 7 was the response. 8 And then in those three minutes from 1:23 to 1:26 is when the conversation 9 10 about the take-private then happened. 11 that's why I texted Deepak a more forceful 12 message saying, "Deepak, you may want to 13 join." Why did you think Deepak might 14 15 want to join? 16 Given that the conversation had Α 17 turned seriously to a take-private 18 transaction and not just, you know, a 19 reflection of their passively owning some 20 Tesla stock, for me, the urgency level was 21 dialed up for Deepak to be involved sooner 22 rather than later. He's the CFO of the company. 23 This 24 is the kind of thing that would certainly 25 affect him.

Page 141 1 And so, in my mind, I went from saying, "Hey, no pressure," to, "Hey, Deepak, you might want to join." 3 In the previous meetings with the 4 Saudis prior to this July 18 meeting, Deepak 5 6 had not been included; is that correct? 7 That is correct. Was there something about this 8 0 9 particular meeting that made you think the 10 Saudis were more serious about a 11 going-private? 12 Yes, absolutely. And maybe this Α is a good opportunity for me to continue the 13 recollection of the conversation. 14 15 0 Sure. 16 So the reasons that I felt this 17 was more serious was, 1, that Yasir said, "Hey, we wanted to do this before, and it 18 19 kind of fizzled out." 20 They clarified the Masa 21 relationship. Elon re-engaged way more 22 seriously, which I could read from his body 23 language and tone and posture than he had in 24 the past. 25 So I got a sense from Elon that it

Page 142 1 was way more serious, as well as from Yasir, as a result of him saying, "I am the decisionmaker. I call the shots." 3 So, in my mind, it's like, okay, 4 we have with the two decisionmakers here in 5 6 the room both with, like, you know, energy 7 and enthusiasm and intent to do this. Yasir also -- I don't remember 8 9 exactly when in the meeting, if it was 10 before or after Deepak got there, said something like, you know, "I want to 11 12 reiterate this is a strategic priority for 13 As Saudi Arabia, we want to diversify 14 from oil. I have support from the most 15 senior levels of the government." He was basically reiterating, you 16 17 know, these conditions that made it feel 18 like, okay, we are having a serious 19 discussion here, not -- where it really felt 20 different in tone and substance from prior 21 meetings. 22 It felt like -- yes, as a result 23 of all those things. And so he said, you 24 know -- and the last thing is there was a back and forth after the, you know, "I am 25

Page 143 the decisionmaker" comment where Elon said 1 something to the effect of, Well, you know, given Tesla's market cap, you know, or given 3 the size of Tesla, whatever it is, something 4 5 like, this is going to require a lot of 6 money, like tens of billions of dollars. 7 And, you know, Yasir said something to the effect of, like, "Don't 8 9 worry about it. We got it." 10 So he was conveying, like, desire 11 to do this, the ability to do this, the fact 12 that he was the one who, you know, could 13 decide. In fact, if they wanted to do 14 15 this -- yes, and all these things came 16 together. And for me, in my mind, you know, 17 and partly, like, based on Elon's reaction where Elon was like, "Oh, wow, like, this 18 19 is" -- like I have said before, Elon sat up 20 straight. He engaged. He leaned in. 21 Like, based on all those things, 22 like, my takeaway was that this was, like, a 23 very serious conversation. 24 Do you recall during the meeting 25 whether anyone from the Saudi PIF was taking

```
Page 244
 1
             Their intent to complete the
     board.
     transaction had not changed in any way.
               I took this to be -- and I believe
 3
     Elon did as well, but you'd have to ask him
 4
 5
     for his view -- but I took this to mean that
 6
     there were -- that he was introducing new
 7
     process steps that had not previously been
     discussed, but that ultimately this was not
 8
 9
     something that would have an effect on their
10
     ability and desire, you know, intent to
     actually complete the take-private
11
12
     transaction.
13
               I'm going to mark another exhibit.
14
               In the ShareFile folder, if you
15
     will open TESLA LITTLETON 320, the Elon Musk
16
     text.
17
               Do you see that?
18
         Α
               Yes.
19
               MS. TRIPODI:
                              For the record,
20
         Exhibit 121 is a document bearing Bates
21
         stamp TESLA LITTLETON 00000320. It's a
22
         document produced in native form.
23
24
25
```

```
Page 245
1
                 (Plaintiff's Exhibit 121, Document
 2.
           Bates TESLA LITTLETON 00000320, was
 3
           marked for identification.)
     BY MS. TRIPODI:
 4
 5
                 I will represent for the record
       that it is a series of Excel spreadsheets
 6
 7
       with Elon Musk's text messages beginning on
       August 1, 2018, going through August 15,
 8
 9
       2018.
10
                 Mr. Teller, I can direct you to
11
       the text messages from August 10, 2018,
12
       specifically at 19:55. I'm on page 8.
13
              Okay, got it.
14
                 On page 8, do you see that at
15
       19:55, there is the subject says
16
       "Attachment." It's an image, and it was
17
       sent by Elon to Yasir?
18
                 Sorry, 19:56, you said?
           Α
                        It's the one directly
19
                 19:55.
20
       above 19:56. So this is approximately
21
       12:55 p.m.
22
           Α
             I see it.
23
                 We just talked about Yasir's call
24
       with Elon which ended around 11:45 a.m. on
25
       August 10. Is that your recollection?
```

```
Page 246
               Sorry, could you say that one more
 1
     time?
            I'm sorry.
 3
         0
               Sure.
 4
               We just talked about the call
     between Yasir and Elon that occurred on
 5
     August 10 that ended around 11:45 a.m.
 6
 7
               Correct.
 8
               Do you recall what this image may
         0
     have been that Elon was sending to Yasir?
 9
10
         Α
               I don't know what that image was,
11
     no.
12
               The next email -- I'm sorry, not
         Q
13
     email, the text -- the next text from Elon
14
     to Yasir says:
15
               "This is a major problem. It is
16
     extremely important that you confirm that
17
     you are in discussions with me regarding the
18
     take-private transaction. Nothing more
19
     needs to be said. If this is not said, we
20
     will never speak again, never."
21
               Does that refresh your
22
     recollection as to what Elon may have sent
23
     to Yasir?
24
               Yes. I would have thought it was
25
     a link, not an image, but maybe it was an
```

Page 247 1 image of the link. 2. It's probably a story. I don't 3 remember where it was published or what it was, but the gist of it was that the PIF was 4 5 not involved in conversations with Tesla, 6 you know, in some way. 7 Were you with Elon at the time that he read this story? 8 9 Α I think so. I think I was still 10 at his house at this time. I don't remember 11 if I was with him at the time that he read 12 the story. I don't remember if I was in the 13 room with him at the moment that he read the 14 story. 15 Q Did you discuss the story with 16 Elon at all? 17 At some point, yes, that day as this stuff was going on, we did have a brief 18 19 conversation about it and his -- yes, sorry, 20 I'll answer your question. 21 What was the conversation that you 0 22 had? 23 It was similar to kind of what he 24 expressed in this text message. He was 25 understandably, as was I, confused how a

Page 248 1 false story like this had been printed. he was frustrated because it did not reflect the truth, and he expressed to me that ended 3 4 Yasir to fix it ASAP. 5 Were you ever aware of individuals at PIF's reaction to Elon's tweets on 6 7 August 7? 8 Α I was not. Did you have any discussion with 9 Q 10 Saad regarding the tweets by Elon on August 7? 11 12 Not that I recall. 13 I'm going to move another document. Sorry, the ShareFile just kicked 14 15 me out. 16 I just moved a document, and it's TESLA LITTLETON 15997. 17 18 Do you see that? 19 Α One second. Yes. 20 MS. TRIPODI: Exhibit 122 is a 21 document bearing Bates stamp TESLA 22 LITTLETON 00015997 through 15998. 23 24 25

```
Page 270
 1
           CERTIFICATE
 3
 4
     STATE OF NEW YORK
 5
                          ss.:
 6
     COUNTY OF NEW YORK )
 7
 8
           I, THOMAS A. FERNICOLA, Registered
 9
     Reporter and Notary Public within and
10
     for the State of New York, do hereby
11
     certify that the within is a true and
12
     accurate transcript of the proceedings
13
     held on Wednesday, August 11, 2021.
14
           That I am not related to any of
15
     the parties to this action by blood or
16
     marriage; and that I am in no way
17
     interested in the outcome of this
18
     matter.
           IN WITNESS WHEREOF, I have
19
20
     hereunto set my hand this 23rd day of
21
     August 2021.
22
23
24
                    THOMAS A. FERNICOLA, RPR
25
```

# Exhibit K

1	Page 1 IN THE UNITED STATES DISTRICT COURT
2	FOR THE NORTHERN DISTRICT OF CALIFORNIA
3	SAN FRANCISCO DIVISION
4	IN RE: TESLA, INC. ) CIVIL ACTION NO:
5	SECURITIES LITIGATION ) 3:18-cv-04865-EMC
6	
7	
8	VIDEOTAPED AND REMOTE ORAL DEPOSITION OF
9	ROBYN DENHOLM
10	OCTOBER 5, 2021
11	
12	VIDEOTAPED AND REMOTE ORAL DEPOSITION OF ROBYN
13	DENHOLM, produced as a witness at the instance of the
14	PLAINTIFFS, and duly sworn, was taken in the above-styled
15	and numbered cause on the 5th day of October, 2021, from
16	10:51 a.m. to 3:21 p.m., before Kathryn R. Baker, CSR,
17	RPR, in and for the State of Texas, reported by machine
18	shorthand in the City of Austin, State of Texas, pursuant
19	to the Federal Rules of Civil Procedure.
20	
21	*CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER*
22	*REVISED*
23	
24	REPORTED BY KATHRYN R. BAKER, RPR, CSR
25	JOB #200188

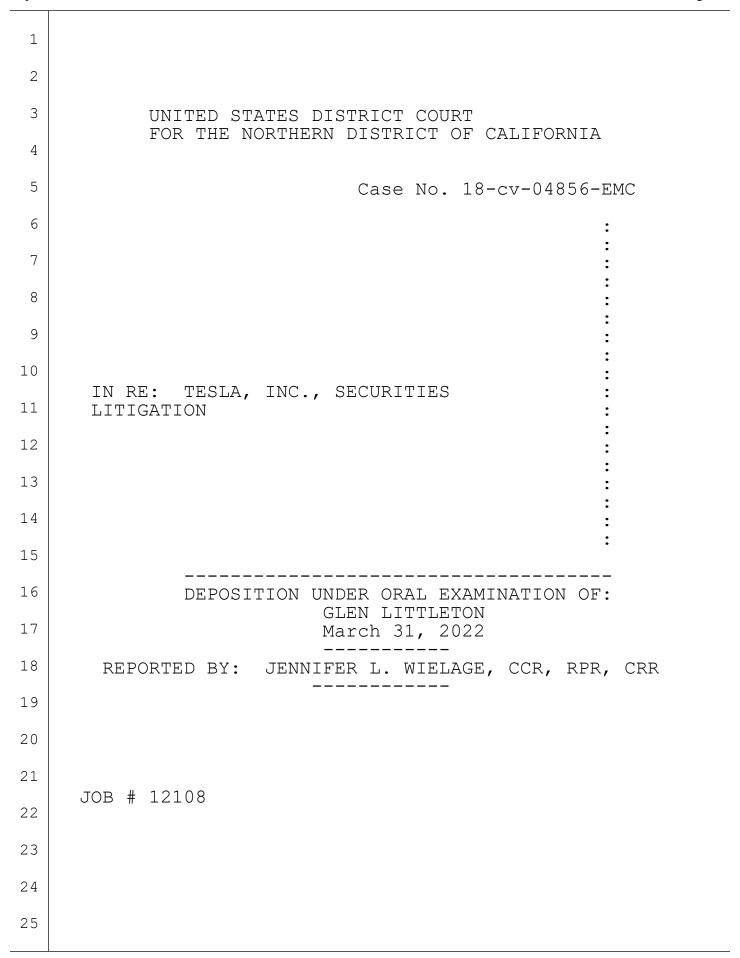
Page 76

- 1 Q. And did you ever come to learn whether counsel
- 2 had indicated to Elon that he was allowed to tweet this
- 3 information? That is a yes-or-no question.
- 4 A. I -- I -- I don't -- I don't think so. So it
- 5 would be a no. So, yeah.
- 6 Q. Did you ever learn whether Elon had discussed
- 7 making this tweet with anyone?
- 8 A. I don't recall him discussing the tweet with
- 9 anyone, but I -- I don't know.
- 10 Q. With respect to the funding secured in the tweet
- in Exhibit 8, did you have an understanding of what that
- 12 meant?
- 13 A. Only with the context of what we discussed in
- 14 the board the previous week in terms of having sources of
- 15 funding for a take-private transaction if that were to
- 16 occur.
- 17 Q. So did you understand funding secured in this
- 18 tweet to mean that funding was available?
- 19 A. Yes.
- 20 Q. In your past experience with M&A transactions,
- 21 were the terms "funding secured" ever used to your
- 22 recollection?
- A. Not -- not that I recall, no.
- Q. In the M&A transactions that you may have had
- 25 experience with in the past, was funding something that

```
Page 143
 1
                IN THE UNITED STATES DISTRICT COURT
              FOR THE NORTHERN DISTRICT OF CALIFORNIA
 3
                      SAN FRANCISCO DIVISION
                                 ) CIVIL ACTION NO:
 4
    IN RE: TESLA, INC.
 5
                                ) 3:18-cv-04865-EMC
    SECURITIES LITIGATION
 7
               *********
 8
                     REPORTER'S CERTIFICATION
 9
                 ORAL DEPOSITION OF ROBYN DENHOLM
10
                          OCTOBER 5, 2021
11
                   (CONDUCTED REMOTELY VIA ZOOM)
               **********
12
13
              I, Kathryn R. Baker, RPR, a Certified Shorthand
14
    Reporter in and for the State of Texas, hereby certify to
15
    the following:
              That the witness, ROBYN DENHOLM, was duly sworn
16
    by the officer and that the transcript of the oral
17
    deposition is a true record of the testimony given by the
18
19
    witness;
20
              I further certify that pursuant to FRCP Rule
21
    30(f)(1) that the signature of the deponent:
22
              X was requested by the deponent or a party
23
    before the completion of the deposition and is to be
24
    returned within 30 days from the date of receipt of the
25
    transcript. If returned, the attached Errata contain any
```

	Page 144
1	changes and the reasons therefor;
2	was not requested by the deponent or a party
3	before the completion of the deposition.
4	I further certify that I am neither counsel for,
5	related to, nor employed by any of the parties or
6	attorneys in the action in which this proceeding was
7	taken, and further that I am not financially or otherwise
8	interested in the outcome of the action;
9	Subscribed and sworn to on this 16th day of
10	October, 2021.
11	Hem R Bur
12	300.040.mae-
13	KATHRYN R. BAKER, RPR, CSR #6955 Expiration Date: 04/30/2023
14	Firm Registration No. 615 TSG Reporting
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	

# Exhibit L



1 I'd have to walk up to the screen. 0. 2 So -- but -- so I don't MR. PRICE: 3 think Mr. Littleton needs it blown up. There we go. 4 Is that okay? 0. 5 It needs to be a little smaller. Α. No. 6 The videos are blocking out half the text. 7 Then just leave it like that. 0. Okay. 8 I can -- I can make it out somewhat. 9 So is this post here the event you're 10 talking about when you're saying that Mr. Musk 11 disavowed going private? 12 Α. Let me see. Yes, ves --13 0. Let me show you --14 MR. PRICE: Let me see if there's 15 already an exhibit number for this. 16 There we go. 17 So if we can bring up Tab 7 and this 18 is a large document. It is -- you see the front page 19 of it -- and I guess we'll mark this as the next 20 exhibit in order and we're at 431 now? Is that 21 right? 22 MR. PORRITT: Yes, I believe so. 23 (Exhibit 431, Plaintiffs' Responses 24 to Defendants' First Set of Interrogatories, 25 was marked for Identification by the court

class action as of September 18?

1	A. Because my wife and I had a long					
2	discussion and we felt an obligation to the charities					
3	we support to try to retrieve some of the funds.					
4	Q. Did you talk to anybody else					
5	A. No.					
6	Q about wanting to pursue a class					
7	action?					
8	A. No, I did not.					
9	Q. Did you have any communications at					
10	all with anybody else about wanting to pursue a class					
11	action?					
12	A. You said, did I have any conversation					
13	with anybody else? Is that what you said?					
14	Q. Communications. I first said talk					
15	and that doesn't include everything.					
16	A. Not that I can remember, no.					
17	Q. Now, you said you and your wife had a					
18	long discussion and felt an obligation to the					
19	charities you were involved with in order to try to					
20	retrieve some of the funds, right?					
21	A. Yes, yes.					
22	Q. So have you made any commitment that					
23	any award that you would get in this class action is					
24	something that you would donate to charity?					
25	A. It's been discussed. We just					

So I'm asking you, do you have any --

1	some sort of an arrangement so that, you know, any				
2	award that you got in this case would be preserved so				
3	that it would pass on to your estate?				
4	A. Well, I can't promise anything. [1]				
5	can't give you a definition precisely now, but a vast				
6	majority of any award would go into our charity fund,				
7	Kansas City Greater Community Foundation, which is a				
8	charity we will use for our estate when we're gone.				
9	So that's all I know. I mean, I hate				
10	to plan on something that I'm not sure about getting.				
11	It's this case, you know, I I hope it will end. I				
12	do, but did I answer your question? I'm sorry.				
13	Q. Let's say, it's fair to say that, as				
14	far as you know, you're under no legal obligation to				
15	use whatever proceeds you would get from this case				
16	A. Oh, no.				
17	Q solely for the purposes of one of				
18	your charities?				
19	A. Correct. We're under no legal				
20	obligation, no.				
21	Q. Do you plan, prior to any award in				
22	this case, to undertake such a legal obligation,				
23	something inviting that would be binding that would				
24	require you to use any funds you would get in this				
25	case and the rest goes to charity?				

1	A. Well, I'm not sure what you're						
2	asking, but anybody who knows Mary, my wife and I						
3	excuse me, I'm sorry, knows we're serious about						
4	charity giving, so I'm not sure how to answer that.						
5	It's very important to me that I mean, I was						
6	actually well, I was just throwing around						
7	different ideas and we haven't come up with any						
8	certainty yet.						
9	Q. Well, I want to go back to your						
10	communications with Mr. Morse.						
11	When you sent him your email on						
12	August 18th, eventually he responded to you and if						
13	you'd look at Tab 6, which we'll mark as are we						
14	now at 435?						
15	(Exhibit 436, Email, 9/26/18, was						
16	marked for Identification by the court						
17	reporter.)						
18	THE VIDEOGRAPHER: This will be 436.						
19	MR. PRICE: 436.						
20	BY MR. PRICE:						
21	Q. There you go, do you see that						
22	Mr. Morse on September 26th sends you something,						
23	subject: Tesla Lead Plaintiff and then emails you						
24	and says: They might only be looking for, quote,						
25	shareholders, but I would call them.						

1 Plaintiff or otherwise. It was all new to me. 2 didn't know anything about it. So, no, I didn't 3 request that -- at least I don't remember quite requesting it, but I didn't mean to request it. 4 5 Ο. The lawyers who were representing you 6 represented that you would be appointed lead counsel, 7 right? 8 Α. I'm sorry? 9 The lawyers who were representing Ο. 10 you, requested that you be appointed lead counsel, 11 right? 12 Α. Yes, correct. 13 Ο. And you had to cooperate with them in 14 that request, correct? 15 I'm not sure what you're asking. Α. Τ 16 mean, cooperate meaning --17 Well, did you -- did you execute Ο. 18 declarations in support of an application that you be 19 appointed Lead Plaintiff? 20 I might -- yes, I did. I must have. Α. 21 I don't recall but I must have. 22 Did you think, at that time, that you 0. 23 were an appropriate representative, as a reasonable 24 investor, to represent the class of plaintiffs that 25 are involved in this case?

1	A. You know, I really did, even though I
2	didn't think about it. I didn't entertain the idea
3	that I would be, but I did. I actually believe it.
4	I abhor short selling. I was never
5	short a stock. I was always a promotor. We bought
6	eight Teslas and I thought, you know, this isn't
7	right. As much as I believe in Elon, he shouldn't
8	get away with hurting small people that are just
9	thrown under the tracks under the bus. So yeah, I
10	did, I thought I would be a good candidate.
11	Q. So you thought that you had
12	possessed, you know, what was necessary to be thought
13	of as a reasonable investor in connection with your
14	investment decisions in the Tesla securities, right?
15	A. Based on my limited knowledge of how
16	the process works, I thought yes.
17	Q. So I think we've previously
18	identified as Exhibit 437 hold on one sec I'm
19	sorry. We marked it as Exhibit 431. I apologize,
20	Exhibit 431, your Interrogatory answers. And if we
21	could look at page 227.
22	Do you see there's an Interrogatory
23	question: IDENTIFY all PERSONS with whom you
24	communicated concerning a potential lawsuit against
25	DEFENDANTS at any time, including any and all current

```
1
               I was approached a few weeks ago by a law
     it says:
 2
     firm representing a class action suit against Elon
 3
     for his representations of taking the company
 4
     private. I had until today to decide about
 5
     participating in the class action.
 6
                    You see that?
 7
            Α.
                    Yes.
 8
                    And you say:
                                   This latest
            0.
 9
     disappointment in Tesla in throwing customers and
10
     investors under the bus is a tipping point for me.
11
                    What were you referring to as the
12
     latest disappointment in October of 2018?
13
            Α.
                    Well, the emails regarding delivery
14
     of these two Teslas to our niece and nephew.
15
                    So before that, you were telling her
            0.
16
     that you hadn't decided to sign on as a plaintiff?
17
            Α.
                    I -- you know, I was so reluctant. I
18
     am so not litigious. I avoid -- I hate the idea of
19
     being litigious. But my wife and I continued to have
20
     conversations about doing the right thing for
21
     charities and not denying the money that they should
22
     have been getting and I said, okay, let's go. But it
23
     took me to the last day, I think, to submit the
24
     documents because I didn't want to. I didn't want to
25
     have to fight Elon like this. I didn't want to.
```

```
1
     just wanted to be an investor in the company and
2
     enjoy the products. I didn't want to do that. I
3
     didn't want to have a confrontation like this.
4
                    But cumulatively and really the
5
     tipping point was really the charity complications
6
     that we thought we had. I mean, my wife has been
7
     involved in charities far longer than I had and she
8
     has this -- and I didn't want to disappoint her, so
9
     that was a tipping point.
10
            0.
                    Well, in that answer you just gave,
11
                The tipping point was discussion about the
     vou said:
12
     charities?
13
            A.
                    Yes.
14
                    Just minutes ago when I asked you --
            0.
     when you say "this latest disappointment" and
15
16
     throwing -- and Tesla throwing customers and
17
     investors under the bus is a tipping point for me,
18
     you said that what you were referring to was the
19
     emails regarding delivery of those two Teslas to our
20
     nieces and nephew.
21
                    So were you just misremembering then
22
     when you said that a few minutes ago or --
23
                    No. It was a cumulative effort and
            A .
24
     the tipping point for this email was a delivery
25
     issue. The tipping point for the class action was
```

1 the charities. 2 Well, this -- this email doesn't 0. 3 refer to the tipping point regarding the email. 4 It refers to, quote, this latest 5 disappointment in Tesla throwing customers and 6 investors under the bus is a tipping point for me --7 Yeah, and that being the delivery 8 fiasco for my niece and nephew, that was the tipping 9 point for this email. 10 But the tipping point for entering 11 the class action was absolutely, positively an 12 obligation to our charities. Make no doubt about it. 13 0. So when you're talking about a 14 tipping point that involves your charities, that is a 15 tipping point that is not mentioned in this email. 16 You didn't use the word tipping point 17 with respect to charities in this email, correct? 18 Α. Uh-huh. 19 Is that a yes? Ο. 20 Α. Yes. 21 Another rule I didn't mention 0. 22 but it's the first time you've done it. It's very 23 impressive. And that is that you said "uh-huh" or "uh-uh", for the court reporter, you have to say yes 24 25 That's the first time or no. And I applaud you.

1 UNITED STATES DISTRICT COURT 2 FOR THE NORTHERN DISTRICT OF CALIFORNIA 3 I, Jennifer L. Wielage, CCR No. 30X100191600, 4 Certified Court Reporter, certify: 5 That the foregoing proceedings were taken 6 before me at the time and place therein set forth, at 7 which time the witness was put under oath by me; 8 That the testimony of the witness, the 9 questions propounded, and all objections and 10 statements made at the time of the examination were 11 recorded stenographically by me and were thereafter 12 transcribed: 13 That a review of the transcript by the 14 deponent was requested; 15 That the foregoing is a true and correct 16 transcript of my shorthand notes so taken. 17 I further certify that I am not a relative or 18 employee of any attorney of the parties, nor 19 financially interested in the action. 2.0 I declare under penalty of perjury under the 21 laws of California that the foregoing is true and 22 correct. 23 Dated this 31st day of March 2021. Jennifer L. Wilage 24 25 Jennifer L. Wielage, CCR, RPR, CRR

# Exhibit M

OPENING INSTRUCTION NO. 2

The party that brings a lawsuit is called the plaintiff. In this case, the lead plaintiff is a pension fund that invested in Puma common stock. Plaintiff, Norfolk Pension Fund, brings this lawsuit as a class representative, which means it is bringing the lawsuit for itself and on behalf of all investors who bought shares of Puma common stock during the period July 22, 2014 and May 29, 2015, which will be referred to as the "Class Period." Unless I distinguish them, I will refer to Norfolk Pension Fund and the Class collectively as "Plaintiffs."

The parties against whom the suit is brought are called defendants. In this action, the defendants are Puma Biotechnology, Inc. and Alan Auerbach, each of whom will be referred to as "Defendants" throughout the trial.

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court's instruction no. 28

Plaintiffs allege that Defendants Puma Biotechnology, Inc. and Alan Auerbach defrauded investors by making untrue statements of material fact and material omissions about clinical trial results regarding the effectiveness and side effects of the drug neratinib. This is referred to as "the Plaintiffs' 10b-5 claim."

On this claim, Plaintiffs have the burden of proving each of the following elements by a preponderance of the evidence:

- 1. Defendants made an untrue statement of a material fact or omitted a material fact necessary under the circumstances to keep the statements that were made from being misleading in connection with the purchase or sale of securities;
- 2. Defendants acted knowingly;
- 3. Plaintiffs relied on the marketplace to ensure the integrity of the price of Puma shares in buying securities; and
- 4. Defendants' misrepresentations and omissions caused Plaintiffs to suffer damages.

If you find that Plaintiffs have proved each of the above elements, your verdict should be for Plaintiffs. If, on the other hand, you find that Plaintiffs have failed to prove any of these elements, your verdict should be for Defendants.

COURT'S INSTRUCTION NO. 30

A defendant acts knowingly when it makes an untrue statement with the knowledge that the statement was false or with reckless disregard for whether the statement was true.

A defendant also acts knowingly when it omits necessary information with the knowledge that the omission would make the statement false or misleading or with reckless disregard for whether the omission would make the statements false or misleading.

"Reckless" means highly unreasonable conduct that is an extreme departure from ordinary care, presenting a danger of misleading investors, which is either known to the defendant or is so obvious that the defendant must have been aware of it.

Puma, which can only act through its employees, acted knowingly with respect to the statements at issue in this case if Mr. Auerbach made the statement knowingly.

#### COURT'S INSTRUCTION NO. 31

Plaintiffs do not have to prove that they justifiably relied on the alleged misrepresentations or omissions in deciding to purchase Puma stock if they meet the requirements for invoking a presumption that it relied on the integrity of the market price. The fraud-on-the-market presumption applies where: (1) the alleged misrepresentations or omissions were publicly known; (2) they were material; (3) the stock traded in an efficient market; and (4) Plaintiffs traded the stock between when the misrepresentations or omissions were made and when the truth was revealed.

Before this trial began, the Court decided that elements (1), (3), and (4) have been established in Plaintiffs' favor. You should treat these elements as having been proven by a preponderance of the evidence. Therefore, the fraud-on-the-market presumption applies if Plaintiffs have proved by a preponderance of the evidence that Defendants made a material misrepresentation or omission.

Defendants may rebut the presumption that Plaintiffs relied on the integrity of the market price when purchasing Puma stock. They can do this by proving by a preponderance of the evidence either (a) that Plaintiffs did not actually rely on the integrity of the market price when it purchased the Puma stock; or (b) that the alleged misrepresentation or omission did not affect the market price of Puma's stock. For example, if Defendants prove Norfolk Pension Fund would have bought Puma stock at the same price, even if it knew the stock price was affected by fraud, the presumption of reliance does not apply.

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### COURT'S INSTRUCTION NO. 33

If you find for Plaintiffs on the §10(b)-5 claim, than you must decide the amount of money damages per share to be awarded to the Plaintiffs. You may award only actual damages in an amount that will reasonably and fairly compensate Plaintiffs for the economic loss they sustained.

Actual damages are measured by the amount of inflation per share of Puma stock caused by the misrepresentations or omissions on which you based your finding of a §10(b)-5 violation. Your award must be based on evidence and not upon speculation, guesswork, or conjecture. Plaintiffs have the burden of proving damages by a preponderance of the evidence. Plaintiffs also bear the burden of separating out the share price decline, if any, caused by factors other than the alleged misrepresentation or omissions.

# Exhibit N

IN THE UNITED STATES DISTRICT COURT

#### FOR THE NORTHERN DISTRICT OF CALIFORNIA

IN RE JDS UNIPHASE CORPORATION SECURITIES LITIGATION

No. C 02-1486 CW

FINAL JURY INSTRUCTIONS

#### DUTY OF THE JURY

Members of the Jury: Now that you have heard all of the evidence, it is my duty to instruct you as to the law of the case. A copy of these instructions will be sent with you to the jury room when you deliberate. You should discard the preliminary instructions; these instructions control and you need not concern yourselves with differences between them and the preliminary instructions. You must not infer from these instructions or from anything I may say or do as indicating that I have an opinion regarding the evidence or what your verdict should be.

#### Parties and Claims

I will first give you a summary of each side's position in this case. I will then tell you what each side must prove to win on each of its claims or defenses.

Plaintiffs claim to have suffered a loss caused by Defendants' alleged violation of the federal securities laws. The securities laws govern the buying and selling of securities, such as stocks and bonds. Plaintiffs have brought claims under Sections 10(b), 14(a), 20 and 20A of the Securities Exchange Act of 1934. Some of the claims apply to all Defendants, while other claims apply to some Defendants and not others. You must consider whether Plaintiffs have proved each claim separately and you must also consider each claim against each Defendant separately.

On any claim, if you find that each of the elements on which Plaintiffs have the burden of proof has been proved, your verdict should be for Plaintiffs on that claim, unless you also find that any Defendant has proved a defense, in which event your verdict should be for that Defendant on that claim.

#### Verdict Table

You will have a Verdict Table on which you will indicate your findings. You will also have a Verdict Questions Form, with instructions and questions to guide you through the process of filling out the Verdict Table.

the challenged statement. If the forward-looking statement is oral, such as during a conference call, the identification of these factors can be made by reference to readily available documents that contain them. If the forward-looking statement is made in writing, the document itself must identify these factors.

With respect to the forward-looking statements only, the Verdict Questions Form and Verdict Table will ask you to find whether Plaintiffs have proved that such cautionary statements were not made.

#### Substantial Involvement

Individual Defendants can be held liable for making a statement, not only for uttering or writing words, but also by being substantially involved in the preparation of the statement. Substantial involvement can include speaking, writing, editing, drafting, preparing, approving or signing a statement. The Verdict Table will identify, in most cases, which Individual Defendant or Defendants actually made the statements and ask you to find whether additional Defendants were substantially involved in the preparation of the statement.

#### Scienter

To satisfy the third element of their Section 10(b) claim, Plaintiffs bear the burden of proving by a preponderance of the evidence that Defendants acted with a particular state of mind, which is called scienter.

You will be asked if Plaintiffs have proved that Defendants acted with actual knowledge that each challenged statement was materially false when made. If you find that actual knowledge was not proven, you will also be asked, for the statements that are not forward-looking statements, if Plaintiffs proved that Defendants acted with deliberate recklessness. The Verdict Table will indicate which statements are in this category. A defendant acts with deliberate recklessness when his actions (i) are an extreme departure from the standards of ordinary care and (ii) present a danger of misleading investors that is either known to the author or speaker or is so obvious that he must be aware of it.

An honest or good faith belief on the part of an Individual Defendant that a statement is true is inconsistent with a finding that he acted with scienter in making that statement.

#### Stock Sales as Evidence of Scienter

Stock sales may be used as evidence of scienter if the sales are dramatically out of line with prior trading practices and made at times calculated to maximize personal benefit from undisclosed inside information. In making this determination, you should consider whether the Individual Defendant's trading patterns are consistent with prior periods and whether the Individual Defendant retained possession of a large portion of his shares.

#### Loss Causation

To satisfy the fourth element of their Section 10(b) claim, Plaintiffs bear the burden of proving by a preponderance of the

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evidence that the misstatements or omissions caused Plaintiffs to suffer an economic loss.

To establish causation, Plaintiffs must prove that the alleged misrepresentation or omission played a substantial part in causing the loss Plaintiffs suffered.

Plaintiffs must prove that the misstatement or omission concealed something from the market, and that as a result JDSU's stock price was higher than it would have been without the material misstatement or omission. Plaintiffs must also prove that, when the concealed information was revealed, it negatively and substantially affected the value of JDSU stock.

## Exchange Act Section 20 Control Person Liability

Under Section 20 of the Securities Exchange Act of 1934, a defendant may be liable, even if he did not make a statement and was not substantially involved in the preparation of the statement, if the defendant had the authority to control the person who did make the statement.

Plaintiffs claim that the Individual Defendants are controlling persons and are therefore liable under this Section for all violations of Section 10(b). On this claim, Plaintiffs have the burden of proving by a preponderance of the evidence that:

- 1. there was a violation of Section 10(b);
- 2. an Individual Defendant directly or indirectly controlled the person who made the challenged statement; and

### $\textbf{Case} \& 4\textbf{1.62} + \textbf{v.008686} & \textbf{CMV} \quad \textbf{Document 4854 FHdd } & \textbf{0.91209207 Plage} & \textbf{1.75 of 0.88} \\$

3.	directly	or	indirectly	induced	the	person	to	make	the
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#### D

#### Defense to Section 20 Control Person Liability

Each of the Individual Defendants contends that, based on a good faith defense, he is not liable to Plaintiffs for statements he did not make, even if he was a controlling person.

In order to establish a good faith defense to control person liability, an Individual Defendant has the burden of proving two elements by a preponderance of the evidence:

- the Individual Defendant did not directly or indirectly induce the violation; and
- 2. the Individual Defendant acted in good faith.

If you find that an Individual Defendant proved both of these elements, your verdict should be for that Defendant. If you find that the Individual Defendant failed to prove either or both of these elements, your verdict should be against that Defendant.

## Section 10(b) and Section 20 Damages for False or Misleading Statements

If you find that Plaintiffs have proven, by a preponderance of the evidence, that one or more of the challenged statements caused a loss, then you must determine the amount of damages, if any, Plaintiffs have suffered. First, you will be asked to determine which method of calculating damages is most accurate. You have heard testimony regarding dollar inflation and percentage inflation.

Then, depending on the method you select, you will be asked to determine the dollar amount or percentage, if any, by which JDSU's stock price was inflated due to each statement that you find false

## **EXHIBIT** O

C6lnlib1 1 UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK 2 3 LIBERTY MEDIA CORP. et al., 4 Plaintiffs, 5 03 CV 2175 (SAS) V. 6 VIVENDI UNIVERSAL S.A., et al., 7 Defendants. 8 9 June 21, 2012 10:04 a.m. 10 Before: 11 HON. SHIRA A. SCHEINDLIN, 12 District Judge 13 **APPEARANCES** 14 BAKER BOTTS LLP 15 Attorneys for Plaintiff Liberty Media Corp. BY: R. STAN MORTENSON 16 MICHAEL CALHOON ALEXANDRA WALSH 17 EVAN WERBEL JULIE RUBENSTEIN 18 RICHARD SOBIECKI WEIL GOTSHAL & MANGES 19 Attorneys for Defendant Vivendi 20 BY: JIM QUINN PENNY REID 21 CAITLYN CAMPBELL 22 CRAVATH, SWAINE & MOORE LLP Attorneys for Defendant Vivendi 23 BY: DANIEL SLIFKIN PAUL C. SAUNDERS 24 TIMOTHY G. CAMERON YONATAN EVEN 25 SARITA PRABHU

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suffered was foreseeable and that the loss was caused by events that revealed information concerning Vivendi's true liquidity risk that previously had been concealed by the false/untrue or misleading statements. If the revelation of information concealed by Vivendi on or before December 16, 2001, concerning Vivendi's true liquidity risk was not a cause of a decline in the stock price, then these misstatements did not cause Liberty's loss.

As I mentioned earlier, Liberty cannot intentionally close its eyes and refuse to investigate the circumstances in disregard of known or obvious risks. If you find that, after signing the Merger Agreement on December 16, 2001, but prior to closing on the agreement on May 7, 2002, Liberty knew or should have known of Vivendi's fraud such that Liberty's continued reliance on the statements made or on before December 16, 20011 was utterly unreasonable, foolish, or knowingly blind, and you further find that Liberty could have walked away from its obligations under the Merger Agreement, then you may find that Liberty has not established that Vivendi's misconduct caused Liberty's loss. In making this determination you will only consider information available as of May 7, 2002.

I do stress the word "available." You may only consider information that was available.

Now, in turning to damages, if you determine that Vivendi is liable to Liberty for breach of warranty or for

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violating Section 10(b), then you must determine the damages to which Liberty is entitled. Liberty has the burden of proving damages by a preponderance of the evidence. Please note that just because I am instructing you on how to award damages does not mean that I have any opinion on whether or not Vivendi should be held liable. That is for you to decide on the evidence presented and the rules of law I have given to you.

If you decide that Liberty is not entitled to recover from defendants, you need go no further. I am instructing you on damages only so that you will have guidance should you decide that Liberty is entitled to recovery.

Any damages you award must have a reasonable basis in the evidence and may not be based on speculation. Damages need not be proven, however, with mathematical certainty, but there must be enough evidence for you to make a reasonable estimate of damages.

The same calculation is used to measure damages for breach of warranty claims and Section 10(b) claims. However, courts use different names for this calculation. In breach of warranty claims damages are called "expectation damages." In Section 10(b) claims, damages are called "out-of-pocket damages." In order to be complete, I must give you a full instruction on both forms of damages. But keep in mind that they both measure the difference between what Liberty actually paid for Vivendi stock and what the Vivendi stock would have

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cost had Vivendi's misrepresentations been disclosed.

One final note on the calculation of damages. If you determine that Liberty is entitled damages on both its breach of warranty and its Section 10(b) claims, you should award whatever amount of damages you find that Liberty suffered for each of these claims, even though this may appear to award the same damages twice. In entering the judgment, the Court will ensure that Liberty does not obtain a double recovery for any injury you find that it suffered.

I will now instruct you on the proper measure of damages for Liberty's breach of warranty claim, that is, expectation damages. You can award such damages only if you find that Liberty has proven all of the elements of any of its breach of warranty claims.

Expectation damages are the difference between the market price of Vivendi shares on the date of the Merger Agreement and their true value at the time the parties entered into that agreement. In order to receive expectation damages, Liberty must prove, by a preponderance of the evidence, that it suffered a loss and that Vivendi's breach of a warranty in the Merger Agreement was a substantial cause of that loss.

There may be factors other than the breach of warranty that affected Vivendi's stock price. Liberty bears the burden of separating the alleged fraud from any other factors that may have affected Vivendi's stock price and ascribe some rough

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proportion of the whole loss to the breach of warranty.

Vivendi is not liable for any loss resulting from those other non-breach related events.

I will now instruct you on the proper measure of damages under Section 10(b) -- the out-of-pocket damages. You can award such damages only if you find that Liberty has proven all of the elements of any of its Section 10(b) claims.

The typical calculation for damages under Section 10(b) is the out-of-pocket calculation, which measures actual damages to Liberty to determine Liberty's out-of-pocket damages, you must calculates the difference between the market value of Vivendi's stock on December 16, 2001, and the price those shares would have cost on that date if there had been no misconduct.

There may be factors other than the alleged false or misleading statements that affect Vivendi's stock price.

Liberty bears the burden of separating the alleged fraud from any other factors that may have affected Vivendi's stock price and ascribe some rough proportion of the whole loss to the alleged false or misleading statement. Vivendi is not liable for any loss resulting from those other non-fraud related events.

Because Liberty has decided not to seek rescissory damages, you should not consider any portion of Craig Elson's testimony that related to rescissory damages.

## **EXHIBIT P**

UNITED STATES DISTRICT COURT	
SOUTHERN DISTRICT OF NEW YORK	
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IN RE VIVENDI UNIVERSAL, S.A.	02 Civ. 5571(RJH) (HBP)
SECURITIES LITIGATION	
	CHARGE TO THE JURY
This Document Relates To:	
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ALL ACTIONS	
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### 28. Damages under Section 10(b)

If you find that plaintiffs have <u>not</u> proven all four elements of their Section 10(b) claim against a particular defendant, then you should find in favor of that defendant and you should not consider the question of damages as to that defendant.

If you find that plaintiffs have proven all of the elements of their Section 10(b) claim against one or more of the defendants, then you must determine the amount of per share damages, if any, to which plaintiffs are entitled. Plaintiffs have the burden of proving damages by a preponderance of the evidence.

Plaintiffs can recover only actual damages, which is the difference between the price plaintiffs paid for each share of Vivendi stock and the price the share would have cost if no false or misleading statement or omission of material fact had occurred—in other words, the inflation in the stock price.

There may be factors other than the alleged false or misleading statements that affected Vivendi's stock price on any given day. Plaintiffs bear the burden of disaggregating (or separating out) any declines that were caused by other non-fraud related events. Defendants are not liable for any loss resulting from those other non-fraud related events.

Any damage calculation you determine must be expressed in terms of the daily amount of inflation per share. A Verdict Form has been prepared which will assist you in this process. You should not be concerned specifically about the amount that any particular class member would be entitled to recover—for example based on whether he or she sold shares or continues to hold them—as those issues would be handled by the Court in a claims administration procedure if your verdict is in favor of plaintiffs. Your only task, if you award damages, is to determine the daily inflation values.

Any damages you award must have a reasonable basis in the evidence. Damages need not be proven with mathematical certainty but there must be enough evidence for you to make a reasonable estimate of damages.

## EXHIBIT Q

## EXCERPTS FROM THE DEPOSITION OF DANIEL FISCHEL TAKEN MARCH 28, 2022

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Page 1
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         UNITED STATES DISTRICT COURT
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      FOR THE NORTHERN DISTRICT OF CALIFORNIA
3
           SAN FRANCISCO DIVISION
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  IN RE TESLA, INC.,
  SECURITIES LITIGATION )Civil Action No.
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                )3:18-cv-04865-EMC
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           *CONFIDENTIAL*
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     REMOTE VIDEOTAPED DEPOSITION OF DANIEL FISCHEL
           Monday, March 28, 2022
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            Chicago, Illinois
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23 Reported By: TRICIA J. LATHOURIS, CSR, RPR
24 JOB NO. 208865
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- 1 2022 at approximately 10:05 AM. My name is Phil
- 2 Rizzuti. I am the legal video specialist from TSG
- 3 Reporting, Inc. The court reporter is Tricia
- 4 Lathouris in association with TSG Reporting.
- 5 Counsels' appearances have already been
- 6 noted on the record by the court reporter.
- Will the court reporter please swear in the
- 8 witness.
- 9 DANIEL FISCHEL,
- 10 called as a witness, having been first duly sworn by
- 11 a Notary Public, was examined and testified as
- 12 follows:
- 13 EXAMINATION
- 14 BY MR. PORRITT:
- 15 Q Good morning, Mr. Fischel. As you may have
- 16 heard --
- 17 A Good morning.
- 18 Q -- my name is Nick Porritt. I'm one of the
- 19 attorneys representing the plaintiff and the class
- 20 in this matter. Just some quick housekeeping before
- 21 we start.
- So is it correct that you've been retained
- 23 as an expert by defendants in this case?
- 24 A Yes.
- 25 Q And you have been asked and have submitted

Page 13 1 has for market efficiency. Q Okay. And that's in connection with Tesla 2 3 notes, correct? A Correct. 4 Q All right. What about Tesla options? Do 6 you plan to offer any opinions regarding the market 7 for Tesla options? MR. BERNSTEIN: Objection to form. 8 9 A I certainly plan to talk about the market 10 for Tesla options. 11 BY MR. PORRITT: Q Let me -- let me ask a better question, 12 13 then. 14 A Yes. Q Sorry. If I may. 15 So do you plan to offer any opinion 16 regarding the efficiency -- the informational 18 efficiency of the market for Tesla options from 19 August 7th, 2018 through August 17th, 2018? MR. BERNSTEIN: Objection. Form. 20 A I -- I think I would offer the opinion that 21 22 because there's -- Dr. Hartzmark did not provide an 23 event study for Tesla options, there's no 24 demonstration in his analysis of whether or not 25 Tesla options satisfied the most basic criteria for

- 1 assumed that that structure was feasible?
- 2 MR. BERNSTEIN: Objection to form.
- 3 A I didn't make any assumption about that one
- 4 way or the other.
- 5 BY MR. PORRITT:
- 6 Q And to be clear, you've not -- you haven't
- 7 seen any documents in this case providing more
- 8 details regarding the structure suggested by
- 9 Mr. Musk, correct?
- 10 MR. BERNSTEIN: Objection to form.
- 11 A Well, I haven't looked for any, so I don't
- 12 recall whether I've seen any or reviewed any. But
- 13 as I said, my focus has been on the public
- 14 statements by Mr. Musk, the board and various
- 15 different categories of market participants,
- 16 analysts and the press.
- 17 BY MR. PORRITT:
- 18 Q Now, regarding the public statements of
- 19 Mr. Musk during the class period, are you offering
- 20 any opinion regarding the materiality of any of
- 21 those statements?
- 22 MR. BERNSTEIN: Objection to form.
- 23 A Well, I think I've already said that the --
- 24 the August 7th and the other disclosures on August
- 25 7th, following the tweet but during trading hours,

## 1 those statements collectively were clearly material

- 2 in terms of the price increase that resulted.
- 3 I believe, if I remember correctly, that
- 4 Dr. Hartzmark found that the New York Times story on
- 5 August 17th also had a statistically significant
- 6 reaction, and I believe that's correct. And if I
- 7 remember correctly, in Dr. Hartzmark's event study,
- 8 he didn't find any other day to be statistically
- 9 significant, I -- if I -- recollection that he had
- 10 some intra-day results that -- where he might have
- 11 found statistic -- statistical significance.
- 12 But as I said, for my purposes, I don't --
- 13 I don't really have any dispute with Dr. Hartzmark's
- 14 statistical findings as opposed to the
- 15 interpretation of those findings.
- 16 BY MR. PORRITT:
- 17 Q Is a statistically significant price
- 18 reaction necessary before any statement or piece of
- 19 information can be considered material?
- 20 MR. BERNSTEIN: Objection to form.
- 21 A I -- I think that really depends on the
- 22 relevant facts and circumstances.
- 23 BY MR. PORRITT:
- 24 Q Well, if it depends on the relevant facts
- 25 and circumstances, that suggests the statistical

- 1 occurred in the real world. And, again, my focus is
- 2 on Dr. Hartzmark provides no basis for concluding
- 3 that a different -- that that disclosure, as opposed
- 4 to a different disclosure, would have had any
- 5 different effect on Tesla's stock price in terms of
- 6 its increase on August 7th. And that being one of
- 7 the basic flaws in his conclusion.
- 8 But, again, speaking hypothetically, in
- 9 light of all the speculation in the analyst reports
- 10 about what exactly Mr. Musk was referring to when he
- 11 said funding secured in a transaction that he was
- 12 considering, if all the information that eventually
- 13 came out about what he was considering when he made
- 14 that statement, if that was in the August 7th
- 15 disclosure, there's no basis. And certainly,
- 16 Mr. Hart -- Dr. Hartzmark presents no basis for
- 17 showing that that alternative hypothetical
- 18 disclosure would have had any different effect. Or
- 19 for that matter, wouldn't have had a more positive
- 20 effect than the actual disclosure, which occurred on
- 21 August 7th.
- 22 Q You don't think that the mark -- the
- 23 analyst discussing all funding secured evidences its
- 24 materiality and impact on stock price?
- 25 MR. BERNSTEIN: Objection to form.

- 1 A I think the entire statement certainly was
- 2 material in the way that many truthful statements
- 3 about possible corporate control transactions are
- 4 typically material. I believe that. And I'm not
- 5 sure if that's responsive to your question.
- 6 BY MR. PORRITT:
- 7 Q Well, have you reviewed the media reaction
- 8 to the tweets on August 7th?
- 9 A Yes, in detail, I have.
- 10 Q Okay. And reviewed the analyst reports
- 11 that were published on August 7th and August 8th
- 12 immediately following the tweets?
- 13 A Yes. And I discuss a lot of them in my
- 14 report.
- 15 Q Is it fair to say that some of those
- 16 analysts placed reliance on the statement "funding
- 17 secured"?
- 18 MR. BERNSTEIN: Objection to form.
- 19 A You know, again, I -- it's -- I think you
- 20 have to be a little bit more specific. You know, I
- 21 think the reality is -- and I discuss this in my
- 22 reports -- the price reaction to the announcement;
- 23 price rose from approximately \$356 to \$379 in
- 24 response to a transaction that Mr. Musk was
- 25 considering at \$420. So there was a lot of

- 1 A I don't believe he stated that he made a
- 2 misrepresentation, in the article or anywhere else.
- 3 BY MR. PORRITT:
- 4 Q So we've been talking about the August 7th
- 5 tweets and talking primarily about the first tweet,
- 6 the 12:48 PM tweet; isn't that correct?
- 7 A I think various questions and answers have
- 8 dealt with other things that came out on August 7th,
- 9 so I wouldn't -- I wouldn't agree that that was the
- 10 only thing we were talking about.
- 11 Q Towards the end of the day, at 3:36 PM,
- 12 Musk sends another tweet forwarding an email he had
- 13 sent to Tesla employees called "Taking Tesla
- 14 Private." And then the tweet commented, "Investor
- 15 support is confirmed. Only reason why this is not
- 16 certain is that it's contingent on the shareholder
- 17 vote."
- Do you recall that tweet?
- 19 A I do.
- 20 Q Okay. Was that new information for the
- 21 market?
- 22 MR. BERNSTEIN: Objection to form.
- 23 A Yes. I -- I think everything about the
- 24 proposed transaction that he was considering was new
- 25 information in the sense that it resulted in a huge

- 1 price increase, a statistically significant price
- 2 increase, on that day.
- 3 BY MR. PORRITT:
- 4 Q If I can refer you back to your rebuttal
- 5 report, Exhibit 423.
- 6 A Okay.
- 7 Q Paragraph 7; do you see that?
- 8 A Yes, I see that.
- 9 Q All right. This -- you write,
- 10 "Dr. Hartzmark opines that had the alleged fraud not
- 11 occurred, Tesla's stock price would have traded on
- 12 every day during the class period at his adjusted
- 13 price of \$312.90."
- 14 Do you see that?
- 15 A I do.
- 16 Q And you cite to Hartzmark report, Paragraph
- 17 174?
- 18 A Correct.
- 19 Q Okay. Can you turn to Paragraph 174 of the
- 20 Hartzmark report, Exhibit 375?
- 21 A Hold on. What paragraph did you say? I'm
- 22 sorry.
- 23 Q It's 174.
- A Hold on.
- Okay. I've got it.

- 1 tweets?
- 2 MR. BERNSTEIN: Objection to form. Vague and
- 3 ambiguous.
- 4 A I'm not -- I'm not sure what you mean what
- 5 would I say? I would say they were made and the
- 6 stock price reacted the way it did.
- 7 BY MR. PORRITT:
- 8 Q Well, I said -- I asked you -- you said
- 9 that -- I asked you whether August 17th stock price
- 10 reaction had no connection with the August 7th
- 11 tweets and you said, no, I would not say that.
- 12 MR. BERNSTEIN: Objection. Objection to form.
- 13 Mischaracterizes the question and the answer.
- 14 BY MR. PORRITT:
- 15 Q So that was one of my questions follow-up,
- 16 but -- so I'll ask the first question again.
- 17 Do you believe there's any connection
- 18 between the stock price reaction seen on August 17th
- 19 and the Elon Musk tweets made on August 7th, 2018,
- 20 the issue in this lawsuit?
- 21 A I mean, when -- when you say any
- 22 connection, yes, I think there's a connection
- 23 because the August 17th interview that Mr. Musk gave
- 24 comes into context of the events that were occurring
- 25 at the time, which include the August 7th tweet --

- 1 or tweets. So, yes, I think there's that
- 2 connection.
- 3 I -- I don't think you can assume that
- 4 there's no context that's relevant in connection
- 5 with the October 17th story and the interview that
- 6 Mr. Musk gave that produced a story.
- 7 BY MR. PORRITT:
- 8 Q If I can refer you to Paragraph 15 on Page
- 9 9 of your rebuttal report, Exhibit 423.
- 10 THE REPORTER: I'm sorry. Which exhibit?
- 11 MR. PORRITT: 423.
- 12 A Is that the rebuttal report?
- 13 BY MR. PORRITT:
- 14 Q That is the rebuttal report, yes.
- 15 A Okay. I got it.
- 16 Q Again, the last sentence -- I'm always
- 17 picking on the last sentence of your paragraphs, I
- 18 think it's just coincidence, but anyway --
- 19 You write, "He" -- referring to
- 20 Dr. Hartzmark -- "ignores the fact that market
- 21 participants understood from the beginning that
- 22 Mr. Musk's proposal lacked details and quickly
- 23 understood that it was uncertain."
- 24 Do you see that?
- 25 A I do.

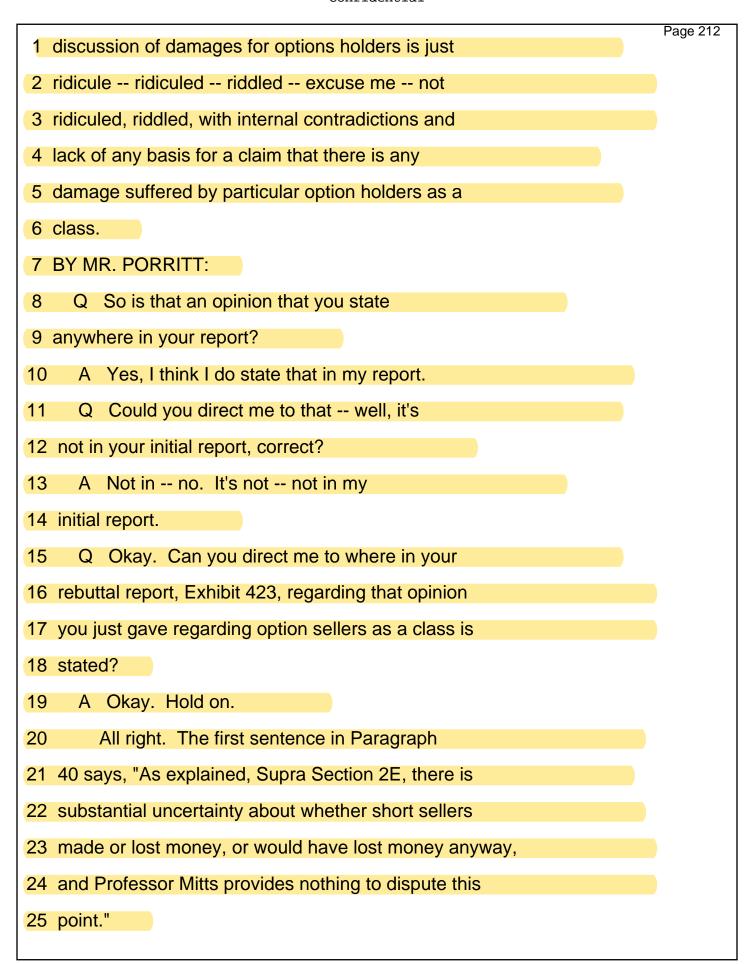
- 1 A I -- I didn't perform a separate analysis
- 2 of that question, but that, again, was part of the
- 3 total mix of information that was, if I remember
- 4 correctly, available to market participants. So it
- 5 certainly could be something which led to what is --
- 6 something that was taken into account in connection
- 7 with the setting of prices, including a price
- 8 decline that occurred.
- 9 Q And what were some of the sanctions that
- 10 might be available to the SEC in an enforcement
- 11 action against Mr. Musk?
- 12 MR. BERNSTEIN: Objection to form.
- 13 A That's really a legal question. I don't
- 14 have a legal opinion in response to that question.
- 15 BY MR. PORRITT:
- 16 Q Are you aware that the SEC, as part of its
- 17 remedies, may seek a bar of an individual serving as
- 18 an officer or director of a public company?
- 19 MR. BERNSTEIN: Objection to form.
- 20 A You know, I certainly have seen cases and
- 21 I've been involved in cases where the SEC has sought
- 22 that remedy.
- 23 BY MR. PORRITT:
- 24 Q How would the market respond to a director
- 25 or officer bar of Elon Musk, for instance, in 2018?

1 MR. BERNSTEIN: Objection to form.	Page 176
2 A Well, obviously, it also is a function of	
3 the probability of success. But generally speaking,	
4 Mr. Musk is responsible, as I said earlier, for an	
5 economic miracle, both prior to the time of August	
6 2018 and subsequent to 2018 in terms of what he's	
7 accomplished and the benefits to investors who	
8 believed in his vision. I I even noticed, I	
9 think one of the articles that you showed me	
10 referred to him as the most successful entrepreneur	
11 in history.	
So, obviously, taking someone like that	
13 who's created so much value for investors, value	
14 that he was trying to protect in the way that he	
15 structured the potential going-private transaction	
16 that he was considering, taking somebody like that	
17 who has created so much wealth for investors, both	
18 before and after August 2018, not to mention the	
19 societal benefits not limited to investors, but,	
20 obviously, correlated with the benefits to	
21 investors, removing that person from the marketplace	
22 would be a negative and I think it would be	
23 perceived as a negative.	
24 MR. PORRITT: Tricia, how long maybe it's a	
25 question for Phil. What's our current running time	

- 1 I also think you said April 7th, again, but --
- 2 MR. PORRITT: Oh, I'm sorry. August 7th. I
- 3 apologize.
- 4 A It must be getting late in the day because
- 5 I didn't pick that up. But I understood what you
- 6 meant.
- 7 MR. BERNSTEIN: Or I'm hearing things, which is
- 8 always possible.
- 9 BY MR. PORRITT:
- 10 Q So -- so let me redo the question or do you
- 11 have an answer framed?
- 12 A I -- well, my answer is, I don't understand
- 13 the question because current stock prices reflect
- 14 past stock prices. You know, so other than that, I
- 15 don't understand the question.
- 16 Q Well, is -- is your response, then, that
- 17 the August 7th, 2018 tweets by Elon Musk were still
- 18 material to the Tesla stock price and the price of
- 19 other securities as of August 13th, 2018?
- 20 A You know, again, I'm not sure what you mean
- 21 by "still material." You can judge the price
- 22 reaction on August 7th to analyze whether the price
- 23 reaction is statistically significant.
- With respect to the price reactions on
- 25 future days, those days are in the context of what's

- 1 occurred before and expectations that have resulted
- 2 from information that -- that -- that has occurred
- 3 prior to the date in question. So to the extent
- 4 that the disclosure on August 13th was affected by
- 5 all the information about the proposed transaction
- 6 that Mr. Musk was considering starting from August
- 7 7th, I think the information, as well as the price
- 8 reactions on August 7th, were still part of the
- 9 total mix of information that was present on August
- 10 13th.
- If that's what you mean by material, I
- 12 would say they're material. If -- if you mean
- 13 something different, then I'm not sure what you
- 14 mean.
- 15 MR. PORRITT: If you could -- Pamela, if you
- 16 could bring over Tab 40 and put it up on there,
- 17 which is the Morningstar report?
- 18 THE REPORTER: Is this 429?
- MR. PORRITT: This will be 429, yes.
- 20 THE REPORTER: Thank you.
- 21 (Exhibit 429 marked for identification.)
- MR. PORRITT: I'll stop sharing this.
- 23 BY MR. PORRITT:
- 24 O So I've placed before the witness a
- 25 document marked as Exhibit 429. It is a Morningstar

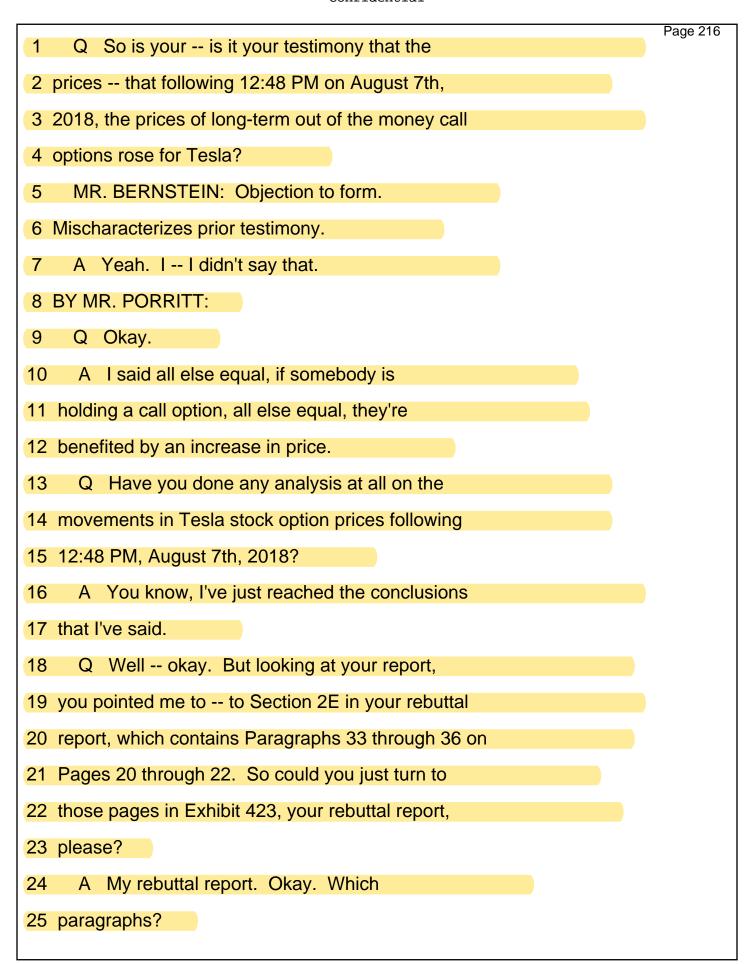
- 1 every single securities fraud case. And what
- 2 Mr. Musk expected or didn't expect, you know, I
- 3 don't have an opinion about that other than I don't
- 4 believe the economic evidence supports the analysis
- 5 of Dr. Hartzmark that you refer to for all the
- 6 reasons that I've already said.
- 7 BY MR. PORRITT:
- 8 Q And just to go back to the use of the word
- 9 "foreseeability" by Professor Mitts. Professor
- 10 Mitts is talking about the foreseeability of the
- 11 increase of the stock price -- we're talking about
- 12 stock -- following a misrepresentation but before
- 13 its falsity is exposed; isn't that correct?
- 14 MR. BERNSTEIN: Objection to form.
- 15 A Again -- but that -- that may be right with
- 16 respect to whatever assumptions that both
- 17 Dr. Hartzmark and Professor Mitts are making, but it
- 18 doesn't change the fact that you have people making
- 19 money and people losing money as a result of the
- 20 exact same price movements. And it also -- it
- 21 completely depends on holding periods -- and, again,
- 22 price movements over longer periods benefit some
- 23 members of the class that's currently defined and
- 24 hurt others.
- 25 You know, so the -- as I said, the whole



1	Q	Okay.	Page 213
2	Α	That's exactly what I just said.	
3	Q	Well, you talked about all options	
4	purch	nasers or sellers.	
5	Α	You know, the same would be true with	
6	respe	ect to all option holders as clear from Section	
7	2E.		
8	Q	Let's refer to Section 2E.	
9		So what analysis have you done of losses or	
10	the e	effects of the alleged misrepresentations in	
11	this	case on	
12	Tŀ	HE REPORTER: I'm sorry. Can you repeat that?	
13	M	R. PORRITT: Yeah.	
14	BY N	MR. PORRITT:	
15	Q	What analysis have you done on the effect	
		e alleged misrepresentations in this case on	
17		orices of Tesla stock options?	
18		It's it's it's really what I just	
		. If you have people who benefit when prices go	
	•	nd people who benefit when prices go down, and	
	-	es go up or down at different points in time.	
		rery, very hard to form any conclusion about	
		h effects dominate over particular periods of	
	time		
25	Q	Well, you could analyze the changes in	

	Page 214
1 Tesla stock options and see the affect of the	Fage 214
2 statements or see the changes in prices as	
3 starting on 12:48 PM on August 7th, 2018.	
4 Have you done that have you looked at	
5 that?	
6 MR. BERNSTEIN: Objection to form.	
7 A No, but it's the same problem. Whatever	
8 price reaction there is, is going to have a	
9 differential effect on people who have calls from	
10 the effect on people who have puts. And that's just	
11 taking the situation on any one day.	
12 If you extend the period of days, and you	
13 don't know when people covered or how long they held	
14 short positions, you know, the complications just	
15 increase.	
16 BY MR. PORRITT:	
17 Q Well, you mentioned short positions again.	
18 I'm not talking about short positions. Let's talk	
19 about a long a person who has a long position in	
20 options.	
21 A I think it's it's I mean, the point	
22 about short sellers is the same as option holders,	
23 generally. I mean, some are going to in the same	
24 way that short sellers are going to benefit when	
25 prices go down and they're going to be hurt when	

Page 215 1 prices go up and, therefore, some shareholders are 2 going to make money, others are going to lose money 3 as a result of price movements at different points 4 in time during the class period and beyond, 5 depending on when they started their position and 6 when they covered. The same -- exactly the same thing is true for option holders, depending on whether they're 9 option holders with calls or option holders with 10 puts. Q Well, what happened to the prices of 11 12 long-term in the money call options on Tesla -- on 13 Tesla stock following the Elon Musk -- following 14 12:48 PM on August 7th, 2018? MR. BERNSTEIN: Objection to form. 15 A Well, obviously, it -- it depends on which 16 option and when they closed out their positions. 18 But all else equal, holders of call options would be benefited by the price increase on August 7th, would be harmed in terms of the value of their economic 21 position by the decrease in Tesla stock price 22 following that day, but benefited again based on the 23 long-run performance of Tesla stock price, which has 24 only increased in value dramatically over time. 25 BY MR. PORRITT:



Page 217 1 Starting on Paragraph 33 on Page 20. 2 Okay. So this -- first of all, this is -- 2E is 4 exclusively about short sellers, correct? MR. BERNSTEIN: Objection to form. 5 A Yes. This section is just about short 6 7 sellers, that's true. BY MR. PORRITT: 9 Q Okay. So, first of all, it doesn't say anything about option traders who were long Tesla, correct? 12 A No. But I -- what I'm saying is, the same 13 considerations that are described in Section 2E also 14 apply to option holders and the differential affect 15 of a price movement on option holders, whether 16 they're holding all options or put options. 17 Q Well --That -- that's what I'm suggesting. 18 19 Q Well, I'm just trying to understand how 20 that applies. I mean, all you've said is that, in 21 the response to stock price movements, some option 22 prices go up and some go down. Is that -- are you saying more than that? 23 24 A Yes. I'm saying that people who have an 25 economic position with a benefit from prices going

Page 221 1 unusual. Q Well, just to turn back to 22E. First of 3 all, does the word "option" even appear in Section 4 22E? 5 A Section 22E? 6 I'm sorry. Section 22E, Paragraphs 33 7 through 36. MR. BERNSTEIN: Objection to form. 8 9 A This is in my rebuttal report? 10 BY MR. PORRITT: Q Correct. 11 A Which paragraphs? 12 Q 33 through 36. 13 A I don't see the word "options" in those 14 15 paragraphs. Q Okay. So -- and, in fact, in your 16 17 introductory sentence in Paragraph 33, you talk 18 about the allegation that Musk's false and 19 materially misleading statements on August 7th, 2018 20 were part of his efforts to harm short sellers of 21 Tesla stock, correct? 22 A If that statement is the first sentence of 23 Paragraph 33; is that what you said? 24 Q Yes. 25 A Yes. That -- that is an allegation.

1	I further certify that this certificate	Page 238
2	applies to the original signed IN BLUE and certified	
3	transcripts only. I assume no responsibility for	
4	the accuracy of any reproduced copies not made under	
5	my control or direction.	
6	Dated: March 30,2022	
7		
8	TRICIA J. LATHOURIS, CSR, RPR	
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10	My Commission Expires:	
11	March 8, 2023	
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## EXHIBIT R

# Northern District of California

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UNITED STATES DISTRICT COURT	
NORTHERN DISTRICT OF CALIFORNIA	

IN RE TESLA, INC. SECURITIES LITIGATION.

Case No. 18-cv-04865-EMC

## FILED UNDER SEAL

ORDER GRANTING IN PART AND DENYING IN PART PLAINTIFF LITTLETON'S MOTION FOR PARTIAL SUMMARY JUDGMENT

Docket No. 352

Plaintiff Glen Littleton has filed a securities class action against Defendants Tesla, Inc.; Elon Musk (Tesla's CEO and former Chairman); and Tesla's Board of Directors based on events that took place in August 2018. Mr. Littleton alleges that Mr. Musk made false representations, most notably in tweets, about taking Tesla from a public to a private company.

Currently pending before the Court is Mr. Littleton's motion for partial summary judgment. He seeks a ruling that four representations made during the relevant period were false and with the requisite mental state (i.e., scienter). He also seeks a ruling that there was reliance on the representations. Having considered the parties' briefs and accompanying submissions, as well as the oral argument of counsel, the Court hereby **GRANTS** in part and **DENIES** in part Mr. Littleton's motion.1

<sup>&</sup>lt;sup>1</sup> On April 1, 2022, Defendants filed a motion to supplement the record, asking the Court to consider deposition testimony of Mr. Littleton that had not been taken at the time of the hearing on the motion for partial summary judgment. See Docket No. 386 (motion). The Court **DENIES** the motion. If Defendants believed that Mr. Littleton's testimony was critical for the summary judgment, then they should have asked for an extension of time to oppose the motion. They did not. In any event, the Court has considered the content of Defendants' motion and it does not

## I. <u>FACTUAL & PROCEDURAL BACKGROUND</u>

The following is a timeline of the relevant events.

1/2017. After Saudi Arabia's sovereign wealth fund – commonly referred to as the Saudi Public Investment Fund ("PIF") – reached out to Tesla, Mr. Musk met with Yasir Al-Rumayyan, a PIF representative. "The planned substance [of the meeting] was not discussed in advance." Teller SEC Depo. at 130. However, it appears that Mr. Musk agreed to meet with the Saudi PIF so that they could "discuss the possibility of [the PIF] working with [Tesla] to take Tesla private." Teller SEC Depo. at 130 (adding that this was his understanding based on a conversation between Mr. Musk and Sam Altman (who co-founded OpenAI with Mr. Musk) "where Elon expressed a desire to take Tesla private [a]nd Sam said these could be great partners to do that or one of the few funds in the world that would have the ability to do so"); see also Teller Depo. at 68-70, 75-76, 80-81 (indicating the same).

**5/2017.** A dinner meeting was held involving the Saudi PIF and Tesla. Mr. Al-Rumayyan of the Saudi PIF attended. He brought with him Masa Son of SoftBank, a company that the PIF had partnered with/invested in. On the Tesla side, attendees included Mr. Musk and Deepak Ahuja, Tesla's CFO. Larry Ellison also attended. *See* Ahuja SEC Depo. at 63-64; Teller Depo. at 70.

According to Mr. Ahuja, at the meeting, Mr. Al-Rumayyan and Mr. Son expressed interest in making "a large potential investment in Tesla in any form that Elon would desire. And that included taking Tesla private as one of the options," which indicated

confidence that they have sufficient funding to take Tesla all the way private.

So it was clear that the conversation here was in – you know, it could be [\$]30 to \$60 billion range of financing for going private transaction, depending on how it's structured.[2] But the numbers were large, and it was clear it was serious and well thought through

affect the Court's analysis herein.

<sup>&</sup>lt;sup>2</sup> Implicitly, structure considerations would take into account the fact that, if the PIF were to take a large percentage of ownership in Tesla, then there would be regulatory issues since the PIF is a foreign entity. *See* Musk SEC Depo. at 132; *see also* Musk Depo. at 101 (indicating that above 20% ownership would require U.S. government approval).

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before their comment.

. . . .

I can't recall for sure if those specific numbers were mentioned, but my recollection is, as I was sitting there, if I was understanding their comments correctly, they were definitely talking about those kind of numbers. They obviously are extremely sophisticated. They knew what the valuation of Tesla was. And if they are offering to take Tesla private, they clearly understood those implications.

. . . .

They talked at length about taking Tesla private, and Elon being – keeping his share [25%], and they had the capacity to do the rest of the deal. That would clearly indicate those sums of money.

Ahuja Depo. at 31, 51-53.

Mr. Ahuja also testified that, subsequently, he had a conversation with Mr. Musk, where Mr. Musk indicated that he was not comfortable about entering into a relationship with Mr. Son specifically. This seemed to be because Mr. Son was making investments in, or contemplating making investments in, companies that "would be likely in conflict with the mission of Tesla, and that would create some unexpected or unintended conflicts which [Mr. Musk] was not comfortable with." Ahuja Depo. at 34. Mr. Musk appeared to have had a negative opinion of Mr. Son for other reasons as well. See Teller SEC Depo. at 160-61 (testifying that "Elon goes a lot on gut feel" and "just felt like [Mr. Son] did not get it"; adding that Mr. Musk was "annoyed about [Mr. Son] continuing to press on this – I believe it was a factory in India [a]nd Elon like didn't understand why [Mr.] Son would even care about that"). According to Mr. Musk, at that point in time, he believed Mr. Al-Rumayyan had "delegated [the] responsibility [of taking Tesla private] to [Mr. Son]." Musk SEC Depo. at 278; see also Teller SEC Depo. at 153 (testifying that Mr. Musk "had turned more skeptical about the possibility of working with the Saudis at this point, and working with Yasir" because "he understood, or his takeaway from the dinner at the Tesla factory ... was basically that these guys [Mr. Al-Rumayyan and Mr. Son] were kind of attached at the hip for purposes of a go private").

<sup>&</sup>lt;sup>3</sup> See, e.g., Ahuja Depo. at 35 (mentioning "investments in other autonomous car companies and other electric car companies, in Uber, which Elon looked at also as a long-term serious competitor in the world and space of autonomous driving").

Northern District of California

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11/2017. It appears that nothing of note with the Saudi PIF happened for the remainder of 2017. However, Mr. Musk continued to entertain thoughts of taking Tesla private, as indicated in a Rolling Stone article. See Batter Decl., Ex. D (on ECF Page 113, noting that Mr. Musk stated, "I wish we could be private with Tesla" and "It actually makes us less efficient to be a public company"").

**4/2018.** It appears the Saudi PIF was again exploring taking a large stake in Tesla. Mr. Musk indicated to Mr. Al-Rumayyan that, if the PIF wished to demonstrate interest in investment in Tesla, "since Tesla's a publicly traded company, they should simply buy stock in Tesla, as a publicly traded company." Musk Depo. at 91; see also Musk Depo. at 93 (testifying that that is what another company, Tencent did -i.e., invest up to the 5% level<sup>4</sup> – and that he cited that example to the Saudi PIF); Teller SEC Depo. at 155 (testifying that Mr. Musk said, in effect, to the PIF, "why don't you show us you're serious and, like, buy some stock?"). The Saudi PIF agreed that it "would go ahead and do it." Musk Depo. at 93.

7/31/2018. Mr. Musk met with representatives of the Saudi PIF, including Mr. Al-Rumayyan. Mr. Musk's "Chief of Staff," Mr. Teller, also attended the meeting. The meeting lasted somewhere between 30-60 minutes. See Musk Depo. at 99; Teller Depo. at 163. Mr. Ahuja attended for the last 10 minutes of the meeting.<sup>5</sup> See Ahuja Depo. at 82.

During the meeting, there was a discussion (as before) about taking Tesla private. See Musk Depo. at 99. (Mr. Teller contacted Mr. Ahuja to get him to join the meeting after the conversation became more serious about taking Tesla private -i.e., not just a passive investment. See Teller Depo. at 140.) The Saudi PIF informed Mr. Musk that it had purchased about 5% of Tesla's stock. See Ex. 79 (text from Mr. Teller); Musk Depo. at 99. According to Mr. Musk,

[t]hey informed me that they had followed through with taking a 5

<sup>&</sup>lt;sup>4</sup> It seems Mr. Musk suggested 5% because "U.S. reporting requirements start at 5 percent." Musk SEC Depo. at 155.

<sup>&</sup>lt;sup>5</sup> Mr. Al Mogren of the Saudi PIF took notes during the meeting. *See* Ex. 80 (notes/minutes).

<sup>&</sup>lt;sup>6</sup> With this purchase, the PIF seems to have become one of Tesla's largest shareholders, along with shareholders such as Mr. Musk himself, Fidelity, Baillie Gifford, T. Rowe Price, and Tencent. See McCall Reply Decl., Ex. R (Morningstar Digest article).

percent stake in Tesla, and I was, like, Well, this is great.

So based on a verbal discussion and a verbal agreement and no discussion of price, they went – they moved forward and took a 5 percent stake in Tesla. So what that meant was that you could trust their word. And so – and no – no written agreement was necessary, and no discussion of price was necessary. And that if they said they would do something, that they would.

Musk Depo. at 99-100.

In addition to the above, Mr. Al-Rumayyan "clarified" for Mr. Musk that he would not delegate any take-private of Tesla to Mr. Son of SoftBank. Musk SEC Depo. at 277; *see also* Musk Depo. at 115. According to Mr. Musk, when he asked Mr. Al-Rumayyan whether there were other decisionmakers who would need to be involved, Mr. Al-Rumayyan said "no" and stated that he was the decisionmaker. *See* Musk SEC Depo. at 115.

According to Mr. Musk, these two facts -i.e., the purchase of about 5% of Tesla stock and the removal of Mr. Son from the picture – were particularly important to him. See Musk SEC Depo. at 146, 279.

However, the total amount of funding needed to take Tesla private was not discussed. Nor was the price to be paid for Tesla stock if the company were to be taken private. *See* Musk Depo. at 109-10; Teller Depo. at 164; Ahuja Depo. at 82, 84, 100-01. In addition, there was no discussion about what percent ownership would be taken by the Saudi PIF if Tesla were to be taken private. *See* Musk Depo. at 112. According to Mr. Ahuja, the Saudi PIF conveyed to Mr. Musk that the PIF "was fundamentally keen on hearing from Elon directly the structure that he would have in mind that he would like to do for a going-private transaction and what percentage of that he would think would be needed or the financial calculations to take it private." Ahuja Depo. at 97-98; *see also* Ex. 80 (notes/minutes written by Mr. Al Mogren of the Saudi PIF) (writing that Mr. Al-Rumayyan said, "I would like to listen to your plan Elon and what are the financial calculations to take it private in the next week and if I did not receive anything I will call you").

8/2/2018. Several days after meeting with the Saudi PIF, Mr. Musk wrote an email to the Board, Mr. Ahuja, and Todd Maron (Tesla's General Counsel), titled "Offer to Take Tesla Private at \$420." See Ex. 81 (email). In the email, Mr. Musk stated, *inter alia*, that "[i]t is my firm belief

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that Tesla can operate more effectively as a private company for the next several years" and that, "[u]nless another bidder comes forward with a better offer, I would ask that this matter be put to a shareholder vote at the earliest opportunity. This offer expires in 30 days." Ex. 81.

After receiving the email, the Board (excluding Mr. Musk and his brother) held a special meeting. See Ex. 82 (minutes). Also present at the meeting were, inter alia, Mr. Ahuja, Mr. Maron, and lawyers from the Wachtell law firm. The Board discussed Mr. Musk's email about taking Tesla private and the interest of the Saudi Arabia PIF "in helping Mr. Musk take the Company private." Ex. 82.

> Mr. Ahuja noted that, based on the statements made by the PIF to Mr. Musk during the meeting, Mr. Musk believed that the PIF was willing to fund the entire transaction. Mr. Ahuja explained, however, that Mr. Musk believed Tencent and other large Tesla shareholders would also participate in any going private transaction, but that Mr. Musk had not yet spoken with them.

Ex. 82. The Board ultimately directed Mr. Maron to schedule another meeting "in which Mr. Musk would provide additional details regarding his proposal and explain to the Board his thinking on a possible going private transaction." Ex. 82.

8/3/2018. The next day, the Board (including Mr. Musk and his brother) held a special meeting at which, *inter alia*, Mr. Ahuja and Mr. Maron were also present. See Ex. 83 (minutes). Mr. Musk explained "his thinking regarding privatization of the Company." Ex. 83. "Mr. Musk stated that it was not his intention to provide shareholder control in a private Company to any single entity, but rather to have ownership in the Company be dispersed over a broad base of shareholders, including many of the Company's current shareholders." Ex. 83. Mr. Musk also "explained the basis for his price of \$420 per share, indicating that this price was about a 20% premium over the current price of the stock, which had just undergone a recent run up after the Company's Q2 earnings call." Ex. 83. With respect to funding, Mr. Musk noted that the PIF indicated

> it was willing to fund the entire going-private transaction. [He] explained that given the PIF's interest, there is more than enough capital available to take the Company private, including to buy out the entire Company if needed, including both the equity and the debt. He also expressed confidence that a large number of existing

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shareholders would remain as investors and thus not need to be bought out, and that there would be significant demand from existing and new investors, which may include the UAE sovereign wealth fund, the Norwegian sovereign wealth fund, Silver Lake, Fidelity, Baillie Gifford, Tencent and T. Rowe Price, such that the Company would be able to choose between investors and allocate ownership among them.

Ex. 83. Regarding advisors, Mr. Musk stated that he would be interviewing a lawyer at the Wachtell law firm and that he had not yet engaged a financial advisor. See Ex. 83. The Board "noted that a detailed proposal regarding a going private transaction had not yet been made and that one would be needed in order for the Board to properly analyze and evaluate it"; but, "[a]s an initial step," Mr. Musk was authorized "to have initial, conceptual conversations with a few of the Company's top shareholders, to explore their interest and gauge their reaction to a private corporate structure." Ex. 83. The Board noted "the importance of not selectively disclosing material non-public information." Ex. 83; see also Musk Depo. at 165 (testifying that he came to the conclusion that it was not possible to have a conversation with some investors but not others without creating a selective disclosure problem); Musk SEC Depo. at 100 (indicating the same).

8/4-8/50218. Mr. Musk had a conversation over the weekend with Michael Dell of Dell Computer. Mr. Musk asked him about his experience taking Dell Computer private. See Musk Depo. at 167. Mr. Dell advised Mr. Musk to talk to Steve Rosenblum of the Wachtell law firm, which Mr. Musk did that same weekend. See Musk SEC Tr. at 175-76.

**8/6/2018.** Mr. Musk spoke with Egon Durban of Silver Lake Partners (a financial advisor) to discuss the possibility of taking Tesla private. See Ex. 175 (Mr. Durban's handwritten notes).

8/7/2018. At 9:48 a.m., Mr. Musk tweeted: "Am considering taking Tesla private at **\$420. Funding secured.**" Ex. 8 (tweet) (emphasis added). About an hour later, he tweeted: "I don't have a controlling vote now [over the company] & wouldn't expect any shareholder to have one if we go private. I won't be selling in either scenario." Ex. 9 (tweet). Then, at 11:00 a.m., he tweeted: "My hope is \*all\* current investors remain with Tesla even if we're private. Would

<sup>&</sup>lt;sup>7</sup> According to Mr. Musk, he intended to do a disclosure in the evening but, that morning, the Financial Times reported an investment in Tesla by the PIF. See Musk SEC Depo. at 219-20; see also Must Depo. at 173 (testifying that it was important to get ahead of the Financial Times).

create special purpose fund enabling anyone to stay with Tesla. Already do this with Fidelity's
SpaceX investment." Ex. 10 (tweet). At 11:13 a.m., he tweeted: "Shareholders could either to se
[sic] at 420 or hold shares & go private." Ex. 11 (tweet). About twenty minutes later, he tweeted
"Def no forced sales. Hope all shareholders remain. Will be way smoother & less disruptive as a
private company. Ends negative propaganda from shorts." Ex. 11.

Shortly after Mr. Musk's first tweet, Mr. Ahuja texted Mr. Musk as follows: "Elon, am sure you have thought about a broader communication on your rationale and structure to employees and potential investors. Would it help if Sarah, Todd and I draft a blog post or employee email for you?" Ex. 121 (text message); *see also* Mot. at 11 (noting that Sarah O'Brien was the head of Tesla Global Communications). An email to employees was then drafted and sent to employees, and further was posted on Tesla's website as a blog post regarding "Taking Tesla Private." Ex. 12 (website). The email/blog post stated, *inter alia*, as follows.

Earlier today, I announced that I'm considering taking Tesla private at a price of \$420/share. I wanted to let you know my rationale for this, and why I think this is the best path forward.

First, a final decision has not yet been made, but the reason for doing this is all about creating the environment for Tesla to operate best. As a public company, we are subject to wild swings in our stock price that can be a major distraction for everyone working at Tesla, all of whom are shareholders. Being public also subjects us to the quarterly earnings cycle that puts enormous pressure on Tesla to make decisions that may be right for a given quarter, but not necessarily right for the long-term. Finally, as the most shorted stock in the history of the stock market, being public means that there are large numbers of people who have the incentive to attack the company.

. . . .

Here's what I envision being private would mean for all shareholders, including all of our employees.

First, I would like to structure this so that all shareholders have a choice. Either they can stay investors in a private Tesla or they can be bought out at \$420 per share, which is a 20% premium over the stock price following our Q2 earnings call (which had already increased by 16%). My hope is for all shareholders to remain, but if they prefer to be bought out, then this would enable that to happen at a nice premium.

. . . .

Finally, this has nothing to do with accumulating control for myself. I own about 20% of the company now, and I don't envision that being substantially different after any deal is completed.

Basically, I'm trying to accomplish an outcome where Tesla can operate at its best, free from as much distraction and short-term thinking as possible, and where there is as little change for all our investors, including all of our employees, as possible.

This proposal to go private would ultimately be finalized through a vote of our shareholders. . . .

Ex. 12.

At 12:36 p.m., Mr. Musk sent out another tweet: "Investor support is confirmed. Only reason why this is not certain is that it's contingent on a shareholder vote." Ex. 13 (tweet) (emphasis added). At the bottom of the tweet, there was a link to the above blog post on "Taking Tesla Private."

There was an immediate reaction to Mr. Musk's tweets and the blog post. For example, on the same day that the tweets and blog post were sent out, several of Tesla's shareholders reached out to Martin Viecha, Tesla's Director of Investor Relations. Mr. Viecha essentially conveyed to these shareholders that there was a "firm offer."

- See Ex. 58 (email exchange with Owuraka Koney of Jennison, dated 8/7/2018) (in response to post-blog post question about funding, Mr. Viecha stating, "The very first tweet simply mentioned 'Funding secured' which means that this is a firm offer"; when asked whether "[f]irm offer means there is a commitment letter or is this a verbal agreement?," stating, "I actually don't know, but I would assume that given we went full-on public with this, the offer is as firm as it gets").
- See Ex. 146 (email exchange with Itay Michaeli of Citibank, dated 8/7/2018) (in response to comment that "the employee letter didn't make it clear whether there's an actual transaction on the table (with secured financing) or if this is more of a strategic announcement to consider pursuing such transaction," Mr. Viecha stating, "the very first Tweet mentioned a firm offer").
- See Ex. 150 (email exchange with Bradley Erickson of KeyBanc, dated 8/7/2018) (in response to comment that "he said financing is secured but in the letter he

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- doesn't address this," Mr. Viecha stating, "I can only say that the first Tweet clearly stated that 'financing is secured.' Yes, there is a firm offer").
- See Ex. 151 (email exchange with Toni Sacconaghi of Bernstein Research, dated 8/7/2018) (Mr. Viecha stating, "apart from what has been tweeted and what was written in a blog post, we can't add anything else. [¶] I only wanted to stress that Elon's first tweet, which mentioned 'financing secured' is correct"; Mr. Sacconaghi then stating, "What does 'financing secured' actually mean? Are you assuming TSLA will need \$60B+ in financing, or assuming that many shareholders don't take the offer and Tesla needs less. Big difference. 'Financing secured' implies the former"; Mr. Viecha responding: "It means that financing is secured regardless of other assumptions").

During a deposition, an employee of T. Rowe Price (one of Tesla's significant shareholders) stated that he assumed "funding secured" meant "[Mr. Musk] had secured sources or financial sources to fund a go-private transaction" – "[t]o have locked and loaded and no question at all a hundred percent that you have funding ready to go and you're prepared to move forward with this transaction." Fath Depo. at 28-29.

Analysts also began to react to the tweets and blog post. See, e.g., McCall Reply Decl., Ex. S (RTC Capital Markets article) (stating that "Elon's tone and messaging regarding a potential transaction lead us to believe that there could be significant outside funding lined up"; adding that there was "an unconfirmed FT article from today indicat[ing] that Saudi Arabia's sovereign fund took a 3-5% stake on the public markets"); McCall Reply Decl., Ex. U (Bank of America/Merrill Lynch article) (noting that "the proposal/transaction is far from finalized, and would require a shareholder vote," plus, "no theoretical transaction method, funding plan, or structure was outlined, and there is still some skepticism over whether such a transaction would ultimately (or even could) be executed"; however, "we view today's announcement as having substance given what appears to be at least three potential sources of capital (existing shareholders, Saudi Sovereign Wealth Fund, Chinese government and investment funds)" and "[f]urther credence was added with potential details in Musk's subsequent tweets regarding the setup of 'special purpose

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fund' for existing investors to remain involved, commentary that no single shareholder woul
have control, and that he would remain on as CEO").

**8/8/2018.** The day after the tweets and blog post, the Tesla Board issue a press release stating as follows:

Last week, Elon opened a discussion with the board about taking the company private. This included discussion as to how being private could better serve Tesla's long-term interests, and also addressed the funding for this to occur. The board has met several times over the last week and is taking the appropriate next steps to evaluate this.

Ex. 26 (press release).

The same day, Ryan Brinkman, an analyst with J.P. Morgan, issued a report on Tesla. *See* Ex. 15 (report). In the report, Mr. Brinkman stated, *inter alia*:

On Tuesday during the market, Tesla CEO Elon Musk announced via Twitter that he is considering pursuing a path (no final decision has been made) which would take the company private at a price of \$420 per share. This was followed up by further statements that "funding has been secured" and "investor support confirmed." As surprising to us as these developments are, and as lacking as the statements are in any details regarding who is expected to provide the required amount of financing and on what terms, they are nevertheless declarative statements from the CEO of a public company which we feel should be considered seriously. Either funding is secured or it is not secured, and Tesla's CEO says funding is secured. Therefore, we are incorporating into our valuation the real possibility the equity will be taken out at \$420 per share. Separate from the Twitter statements, the company also made public a letter Mr. Musk had written to Tesla employees in which he states, "If the process ends the way I expect it will, a private Tesla would ultimately be an enormous opportunity for all of us." To us, this suggests more than mere consideration – Mr. Musk expects Tesla will go private. We are not as certain, and so assign only a 50% probability to such a scenario in our updated valuation. We continue to believe Tesla's valuation based on fundamentals alone . . is worth no more than \$195 (our previous price target). But introducing a new 50% weighting of \$420 suggests a large upward revision to our price target is warranted, and we newly value Tesla at \$308 per share (i.e., 50/50 blend of \$195 and \$420).

Ex. 15.

An analyst of a different company, Evercore, also issued a report on Tesla. The Evercore analyst's comments included the following:

**Could this happen?** It is important to note that, as of today, no details have been provided with regards to what "Funding secured" means, who is providing that funding and what any potential

Northern District of California

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funding structure might look like. Our view is that "Funding secured" should be interpreted as a strong verbal commitment, with funds available and parties willing to execute quickly. However, it could be less than this. It may also be that initial legal documents, term sheets, letters of intent have been signed.

Ex. 33 (report) (bold in original).

8/10/2018. Mr. Musk met with Mr. Durban of Silver Lake Partners. See Ex. 179 (Silver Lake presentation materials).

That same day, it appears that news was being reported about Tesla and the Saudi PIF. Mr. Musk conveyed his displeasure to Mr. Al-Rumayyan of the Saudi PIF, indicating that he felt the news did not accurately represent the PIF's interest in Tesla. See Ex. 121 (Mr. Musk texting, "It is extremely important that you confirm that you are in discussions with me regarding the take private transaction"); Musk Depo. at 226 (testifying that "I think there was some press or statement about – from the – the Saudi PIF that they were less committed to the – to supporting a take-private then, was my understanding"). Mr. Al-Rumayyan responded:

> Elon, As you know, PIF purchased a passive stake in shares of Tesla on the market in April 2018 as part of our investment strategy to diversify away from oil and increase our investment in emerging technologies, including electronic vehicles. PIF remains interested in potential investment opportunities that are consistent with its investment strategy and the EV space is one of interest. We would like to explore investing in Tesla subject to being able to create a Tesla production hub in the Kingdom of Saudi Arabia that serves MENA, Europe, Asia and Africa with the right incentives on all fronts (subsidies on energy and land, tax exemptions, support in obtaining financing, etc.). Therefore, as discussed, we would like our teams to start working together in a confidential manner to explore a potential transaction.

Ex. 121.

At some point, Mr. Musk had a conversation with Mr. Al-Rumayyan in which the latter indicated that there were approvals he needed to obtain regarding investment in Tesla (i.e., he was not the one and only decisionmaker). According to Mr. Teller, however, Mr. Al-Rumayyan was still unequivocal about the PIF's desire to invest. See Teller SEC Depo. at 296-98; Teller Depo. at 241-42.

8/11/2018. Mr. Musk informed the Board (as well as Mr. Maron and Mr. Ahuja) that he had formally engaged Mr. Durban of Silver Lake Partners "to lead the Tesla go-private

Northern District of California

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transaction," as well as Mr. Rosenblum of the Wachtell law firm ("who was lead counsel on the Dell deal"). Ex. 94 (email) (adding that Goldman Sachs was also supportive).

8/12/2018. Mr. Musk again conveyed displeasure to Mr. Al-Rumayyan of the Saudi PIF based on what appears to be news reporting. See, e.g., Ex. 121 (Mr. Musk texting, "What the hell is going on here? This is false"). In responding, Mr. Al-Rumayyan noted, inter alia: "Just wanted to check-in and see when your team would be able to start sending us information and perhaps have a kickoff call with our International Investments Team." Ex. 121. Mr. Al-Rumayyan later texted:

> Let's see the numbers and get our people to meet and discuss. We cannot approve something that we don't have sufficient information on. We've agreed that you will send the financial information and the way going forward within a week and no thing [sic] happened since. The last thing I want to do is the "through [sic] you under the bus[.]" I am your friend. So, please don't treat me like an enemy. I'm willing to fly to you or we can meet somewhere in Europe and discuss . . . constructive next steps.

Ex. 121 (also referring to "[d]etails on how we can take the company private[;] [t]hat's what we agreed on[;] [w]hat is the required percentage and so on[;] [w]hat are required regulatory thresholds for taking it private").

After additional exchange, Mr. Musk texted: "There are many other investment funds who want to be part of this deal. We do not need your fund to get this done. I will not work with an organization who's [sic] public statement to the media do[es] not match their private statements to me and my team." Ex. 121. He continued: "In light of these actions and nothing meaningful done to correct them, Tesla will be moving forward with Silver Lake, Goldman and other investors to take Tesla private." Ex. 121.

It appears that, in spite of Mr. Musk's comment above, Mr. Musk and Mr. Al-Rumayyan resolved their dispute later that day. See Ex. 121 (Mr. Al-Rumayyan texting, "I will ask Shihana to call Sam so they can work on PIF statement" and Mr. Musk responding, "Thank you. This means a great deal").

8/13/2018. An update was posted on the Tesla website (as a blog post): "Update on Taking Tesla Private." In the update, Mr. Musk stated, *inter alia*, as follows:

As I announced last Tuesday, I'm considering taking Tesla private because I believe it could be good for our shareholders, enable Tesla to operate at its best, and advance our mission of accelerating the transition to sustainable energy. As I continue to consider this, I want to answer some of the questions that have been asked since last Tuesday.

## What has happened so far?

On August 2nd, I notified the Tesla board that, in my personal capacity, I wanted to take Tesla private at \$420 per share. This was a 20% premium over the ~\$350 then current share price (which already reflected a ~16% increase in the price since just prior to announcing Q2 earnings on August 1st). My proposal was based on using a structure where any existing shareholder who wished to remain as a shareholder in a private Tesla could do so, with the \$420 per share buyout used only for shareholders that preferred that option.

After an initial meeting of the board's outside directors to discuss my proposal (I did not participate, nor did Kimbal [Mr. Musk's brother and also a Board member], a full board meeting was held. During that meeting, I told the board about the funding discussions that had taken place (more on that below) and I explained why this could be in Tesla's long-term interest.

At the end of that meeting, it was agreed that as a next step, I would reach out to some of Tesla's largest shareholders. Our largest investors have been extremely supportive of Tesla over the years, and understanding whether they had the ability and desire to remain as shareholders in a private Tesla is of critical importance to me. They are the ones who believed in Tesla when no one else did and they are the ones who most believe in our future. I told the board that I would report back after I had these discussions.

### Why did I make a public announcement?

The only way I could have meaningful discussions with our largest shareholders was to be completely forthcoming with them about my desire to take the company private. However, it wouldn't be right to share information about going private with just our largest investors without sharing the same information with all investors at the same time. As a result, it was clear to me that the right thing to do was announce my intentions publicly. To be clear, when I made the public announcement, just as with this blog post and all other discussions I have had on this topic, I am speaking for myself as a potential bidder for Tesla.

## Why did I say "funding secured"?

Going back almost two years, the Saudi Arabian sovereign wealth fund has approached me multiple times about taking Tesla private. They first met with me at the beginning of 2017 to express this interest because of the important need to diversify away from oil. They then held several additional meetings with me over the next year to reiterate this interest and to try to move forward with a going private transaction. Obviously, the Saudi sovereign fund has more than enough capital needed to execute on such a transaction.

.... During the [July 31] meeting, the Managing Director of the fund expressed regret that I had not moved forward previously on a going private transaction with them, and he strongly expressed his support for funding a going private transaction for Tesla at this time. I understood from him that no other decision makers were needed and that they were eager to proceed.

I left the July 31st meeting with no question that a deal with the Saudi sovereign fund could be closed, and that it was just a matter of getting the process moving. This is why I referred to "funding secured" in the August 7th announcement.

Following the August 7th announcement, I have continued to communicate with the Managing Director of the Saudi fund. He has expressed support for proceeding subject to financial and other due diligence and their internal review process for obtaining approvals. He has also asked for additional details on how the company would be taken private, including any required percentages and any regulatory requirements.

Another critical point to emphasize is that before anyone is asked to decide on going private, full details of the plan will be provided, including the proposed nature and source of the funding to be used. However, it would be premature to do so now. I continue to have discussions with the Saudi fund, and I also am having discussions with a number of other investors, which is something that I always planned to do since I would like for Tesla to continue to have a broad investor base. It is appropriate to complete those discussions before presenting a detailed proposal to an independent board committee.

. . .

### What are the next steps?

As I mentioned earlier, I made the announcement last Tuesday because I felt it was the right and fair thing to do so that all investors had the same information at the same time. I will now continue to talk with investors, and I have engaged advisors to investigate a range of potential structures and options. Among other things, this will allow me to obtain a more precise understanding of how many of Tesla's existing public shareholders would remain shareholders if we became private.

If and when a final proposal is presented, an appropriate evaluation process will be undertaken by a special committee of Tesla's board, which I understand is already in the process of being set up, together with the legal counsel it has selected. If the board process results in an approved plan, any required regulatory approvals will need to be obtained and the plan will be presented to Tesla shareholders for a vote.

Ex. 16 (website) (bold in original); *see also* Batter Decl., Ex. K (tweet) ("I'm excited to work with Silver Lake and Goldman Sachs as financial advisors, plus Wachtell . . . and Munger . . . as legal

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advisors,	on the	proposal	to	take	Tesla	private."	١.

Apparently responding to the website posting, Mr. Al-Rumayyan texted Mr. Musk as follows:

Elon, I am personally surprised. You have signed an NDA and while we are waiting for you and your team to provide us with information to move forward, you post an ill-advised blog with loose information. Anyway, we hope that you and your team work on gathering the information as soon as possible and send that to us to move forward.

Ex. 121. Mr. Musk texted back, *inter alia*, that he had engaged Silver Lake Partners and Goldman Sachs and "[w]e will have documents ready in about a week." Ex. 121.

**8/14/2018.** An analyst commented on the blog post described above as follows: "Tesla CEO Elon Musk issued a blog post Aug. 13 that states he is still gauging shareholder interest in Tesla going private at \$420 a share, but our impression of his words is that he thinks it can happen, and we agree." McCall Reply Decl., Ex. R (Morningstar Digest article).

We are maintaining our fair value estimate. We have changed our thinking since our Aug. 7 note and will not be raising our fair value estimate to the deal price. We normally would increase our valuation to a probability-weighted average of the offered price and our intrinsic value. However, Tesla's possible buyout is abnormal in that equityholders have the option to remain equityholders in a private Tesla, or at least own a special-purpose vehicle that would in turn own private Tesla, so we view this deal as similar to a tender offer.

McCall Reply Decl., Ex. R.

8/16/2018. The New York Times published an article on Mr. Musk and Tesla, titled "Elon Musk Details 'Excruciating Personal Toll of Tesla Turmoil." See Ex. 19 (article). The article stated, inter alia, that

funding, it turned out, was far from secure.

Mr. Musk has said he was referring to a potential investment by Saudi Arabia's government investment fund. Mr. Musk had extensive talks with representatives of the \$250 billion fund about possibly financing a transaction to take Tesla private – maybe even in a manner that would have resulted in the Saudis' owning most of the company. One of those sessions took place on July 31 at the Tesla factory in the Bay Area, according to a person familiar with the meeting. But the Saudi fund had not committed to provide any cash, two people briefed on the discussions said.

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8/20/2018. Mr. Brinkman, the J.P. Morgan analyst, issued another report on Tesla. See Apton Decl., Ex. 23 (report). In the report, he stated that J.P Morgan was "reverting to valuing Tesla shares on the basis of fundamentals alone . . . . " Ex. 23. He took note of the August 13 posting by Mr. Musk on the Tesla website which discussed, inter alia, the July 31 meeting with the Saudi Arabian sovereign wealth fund. "Our interpretation of subsequent events leads us to believe that funding was not secured for a going private transaction, nor was there any formal proposal." Ex. 23 (emphasis in original).

> The revelation the Saudi firm is subsequently asking Tesla for details of how the company would be taken private suggests to us that any deal is potentially far from even being formally proposed, which is different from our understanding on August 8 which was based on Mr. Musk's statement on Twitter that, "Only reason why this is not certain is that it's contingent on a shareholder vote."

Ex. 23. Mr. Brinkman also stated: "Tesla does appear to be exploring a going private transaction, but we now believe that such a process appears to be much less developed than we had earlier presumed (more along the lines of high level intention), suggesting formal incorporation into our valuation analysis seems premature at this time." Ex. 23 (emphasis in original).

> When Mr. Musk tweeted on August 7 that, "Only reason why this is not certain is that it's contingent on a shareholder vote," we had presumed that a formal proposal had been received from another party, that funding had been secured for that formal proposal, and that the Board was at least informally supportive of the formal proposal. Given our updated interpretation that none of these three presumptions are [sic] currently the case, we feel it is appropriate at this time to remove the 50% weighting . . . .

## Ex. 23.

8/23/2018. The Board held a special meeting. The potential going-private transaction was discussed. See Ex. 101 (minutes). Mr. Musk stated that "there was more than enough funding for any proposed transaction and that he had asked his financial advisors to join the meeting to review with the Board the various potential financing sources available." Ex. 101. But he also shared that many of Tesla's current stockholders had a negative view

regarding the prospect of the Company going private, [there were]

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continuing to own Tesla's stock if the Company went private [e.g., internal compliance would not permit ownership], [and there were] procedural difficulties of any going private transaction, including the extended length of time such a transaction would require, [which] may distract and negatively impact the Company's focus on its core business.

difficulties the Company's current stockholders would have in

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Ex. 101. Mr. Musk's financial advisors, Mr. Durban from Silver Lake Partners and Mr. Dees from Goldman Sachs, joined the meeting; they discussed "financing sources for a potential going private transaction." Ex. 101; see also Ex. 201 (Silver Lake presentation materials). "The financial advisors emphasized to the Board that, although their work was preliminary, the funding was available from a variety of sources." Ex. 101. "Some of the specific funding sources identified . . . included the UAE and Saudi Arabia sovereign wealth funds; Ron Baron's funds; Google (Alphabet); Tencent and/or other Chinese investors; and Silver Lake." Ex. 101. The advisors, as well as Mr. Musk, informed the Board that "both large institutions and small investors strongly preferred seeing the Company remain a public company because, among other reasons, of investment restrictions that prevented or limited certain large institutional stockholders from owning shares in a private company." Ex. 101. Ultimately, the advisors expressed the "belie[f] that the Company would be better continuing as a public company." Ex. 101. Mr. Musk then informed the Board that, based on the information before him, "he now had concluded that it was no longer in the best interests of the Company and its stockholders to take the Company private. Accordingly, Mr. Musk informed the Board that he was withdrawing his offer to try and take the Company private." Ex. 101. The Board voted to continue Tesla as a public company. See Ex. 101.

## II. <u>DISCUSSION</u>

## A. Requests to Seal

Several requests to seal have been filed in conjunction with the summary judgment briefing.

- Docket No. 351 (related to the opening brief and supporting exhibits);
- Docket No. 364 (related to the opposition brief and supporting exhibits);
- Docket No. 367 (related to the opposition brief and supporting exhibits); and

Northern District of California

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Docket No. 369 (related to the reply brief and supporting exhibits).

The confidential information at issue belongs to Tesla or third parties (including Silver Lake, Goldman Sachs, and Tesla's investors). Mr. Littleton expressly states that he objects to sealing and does not believe that the documents are deserving of confidential treatment, although he does not go into any detail. See, e.g., Docket No. 364 (Mot. at 1).

Declarations supporting the filing under seal have been submitted by Tesla, Silver Lake, and Goldman Sachs. See Docket No. 361 (Tesla); Docket No. 362 (Mr. Durban/Silver Lake); Docket No. 364-1 (Tesla); Docket No. 367-1 (Tesla); Docket No. 373 (Mr. Durban/Silver Lake); Docket No. 374 (Tesla); Docket No. 375-1 (Goldman Sachs).

In evaluating the requests to file under seal, the Court must bear in mind the standard established by the Ninth Circuit in Kamakana v. City & County of Honolulu, 447 F.3d 1172 (9th Cir. 2006).

> Unless a particular court record is one "traditionally kept secret," a "strong presumption in favor of access" is the starting point. A party seeking to seal a judicial record then bears the burden of overcoming this strong presumption by meeting the "compelling reasons" standard. That is, the party must "articulate[] compelling reasons supported by specific factual findings" that outweigh the general history of access and the public policies favoring disclosure, such as the "'public interest in understanding the judicial process." In turn, the court must "conscientiously balance[] the competing interests" of the public and the party who seeks to keep certain judicial records secret. After considering these interests, if the court decides to seal certain judicial records, it must "base its decision on a compelling reason and articulate the factual basis for its ruling, without relying on hypothesis or conjecture."

Id. at 1178-79.

The Court finds that Silver Lake and Goldman Sachs have satisfied the compelling reasons standard for their requests to file under seal. Both companies are third parties to this litigation; more important, their requests to seal are sufficiently narrowly tailored.

However, the Court does not reach the same conclusion for Tesla's requests to seal. While there may be compelling reasons to keep certain information confidential (e.g., related to the interests of Tesla's investors), Tesla has, for the most part, painted with a broad brush in making its requests to file under seal. The information at issue may not be information that Tesla would

ordinarily share with the public, but it is far from clear that Tesla would suffer any harm as a result of disclosure, especially as the proposed transaction never came to fruition and is well in the past. Tesla has not suggested that disclosure of the bulk of the information would, *e.g.*, hinder its ability to obtain financing, to court new investors, or to preserve its relationships with existing investors. Furthermore, it is notable that Mr. Musk himself made public comments about why he made statements that, *e.g.*, "funding [was] secured." Having provided a public explanation, he as well as Tesla can hardly complain if additional underlying facts are also disclosed. Finally, even Tesla implicitly recognizes that its sealing requests are problematic. In the supporting declarations, Nathaniel Smith of Tesla repeatedly states: "In Tesla's view, sealing the materials for a brief period of time – until trial – balances the public's right to access with Tesla's ability to preserve the sensitive and confidential nature of its information." Docket No. 361 (Smith Decl. ¶ 11); Docket No. 364-1 (Smith Decl. ¶ 12); Docket No. 367-1 (Smith Decl. ¶ 7); Docket No. 374 (Smith Decl. ¶ 10).

Accordingly, the Court grants Silver Lake and Goldman Sachs's requests to file under seal but denies Tesla's. Tesla's requests to seal are denied without prejudice -i.e., the Court shall give Tesla an opportunity to file a narrowly tailored request for sealing. Tesla shall file a new request to seal within two weeks of the date of this order. So as to potentially avoid disputes, the Court orders the parties to meet and confer to see if they can reach agreement on sealing. If agreement is reached, the parties may submit (in lieu of a new motion to seal by Tesla) a stipulation on sealing within two weeks of the date of this order.

## B. <u>Legal Standard</u>

Federal Rule of Civil Procedure 56 provides that a "court shall grant summary judgment [to a moving party] if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). An issue of fact is genuine only if there is sufficient evidence for a reasonable jury to find for the nonmoving party. *See Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248-49 (1986). "The mere existence of a scintilla of evidence . . . will be insufficient; there must be evidence on which the jury could reasonably find for the [nonmoving party]." *Id.* at 252. At the summary judgment stage, evidence

must be viewed in the light most favorable to the nonmoving party and all justifiable inferences are to be drawn in the nonmovant's favor. *See id.* at 255.

Where a plaintiff moves for summary judgment on claims that it has brought (*i.e.*, for which it has the burden of proof), it "must prove each element essential of the claims . . . by undisputed facts." *Cabo Distrib. Co. v. Brady*, 821 F. Supp. 601, 607 (N.D. Cal. 1992); *see also Fontenot v. Upjohn Co.*, 780 F.2d 1190, 1194 (5th Cir. 1986) (stating that, "if the movant bears the burden of proof on an issue, either because he is the plaintiff or as a defendant he is asserting an affirmative defense, he must establish beyond peradventure all of the essential elements of the claim or defense to warrant judgment in his favor") (emphasis omitted).

In the instant case, Mr. Littleton has brought two causes of action: (1) a claim for violation of § 10(b) of the Securities Exchange Act of 1934 and Rule 10b-5 against Tesla and Mr. Musk and (2) a claim for violation of § 20(a) against the Tesla Board. The main cause of action is the § 10(b)/Rule 10b-5 claim. To succeed on that claim, Mr. Littleton must prove (1) a misrepresentation or omission of a material fact; (2) scienter; (3) causation; (4) reliance; and (5) damages. *See Livid Holdings Ltd. v. Salomon Smith Barney, Inc.*, 403 F.3d 1050, 1055 (9th Cir. 2005) (stating that these are the elements of a Rule 10b-5 claim). In the pending motion, Mr. Littleton moves for partial summary judgment on the following issues: (1) falsity (with respect to four statements); (2) scienter (with respect to the same); and (3) reliance.

## C. Falsity and Scienter

For the § 10(b)/Rule 10b-5 claim, Mr. Littleton must first show there is no genuine dispute of material fact that a false or misleading statement was made or that there was a misleading omission. See Brody v. Transitional Hosps. Corp., 280 F.3d 997, 1006 (9th Cir. 2002). A false statement is one that is not true. Even if a statement is literally true, it can still be misleading. See id. "[A] statement is misleading if it would give a reasonable investor the impression of a state of affairs that differs in a material way from the one that actually exists." Retail Wholesale & Dep't Store Union Local 338 Ret. Fund v. Hewlett-Packard Co., 845 F.3d 1268, 1275 (9th Cir. 2017) (internal quotation marks omitted; adding that, "to be misleading, a statement must be 'capable of objective verification"). An omission can also be misleading – but "[o]ften, a statement will not

mislead even if it is incomplete or does not include all relevant facts." *Brody*, 280 F.3d at 1006. "Silence, absent a duty to disclose, is not misleading under Rule 10b-5." *Basic Inc. v. Levinson*, 485 U.S. 224, 239 n.17 (1988).

In addition to falsity, Mr. Little must also show there is no genuine dispute regarding scienter. "Scienter may be established . . . by showing that the defendants knew their statements were false, or by showing that defendants were reckless as to the truth or falsity of their statements." *Gebhart v. SEC*, 595 F.3d 1034, 1041 (9th Cir. 2010); *see also SEC v. Platforms Wireless Int'l Corp.*, 617 F.3d 1072, 1093 (9th Cir. 2010) (noting that there can be either "deliberate recklessness" or "conscious recklessness"). Scienter is "a subjective inquiry"; that is, "[i]t turns on the defendant's actual state of mind." *Gebhart*, 595 F.3d at 1042. However, "the objective unreasonableness of a defendant's conduct may give rise to an inference of scienter," and, therefore, evidence of "extreme departure from ordinary standards of care" may be considered. *Id.* at 1041-42. Evidence as to whether the defendant "appreciate[d] the gravity of the risk of misleading others" may also be considered," but

a defendant ordinarily will not be able to defeat summary judgment by the mere denial of subjective knowledge of the risk that a statement could be misleading. Summary judgment requires a statement that is materially misleading such that no reasonable jury could conclude otherwise. See Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248-50 (1986). Moreover, the statement must present a danger of misleading buyers or sellers "that is either known to the defendant or is so obvious that the actor must have been aware of it." Hollinger, 914 F.2d at 1569. When the defendant is aware of the facts that made the statement misleading, "he cannot ignore the facts and plead ignorance of the risk." Makor Issues & Rights, Ltd. v. Tellabs Inc., 513 F.3d 702, 704 (7th Cir. 2008); see also Vucinich v. Paine, Webber, Jackson & Curtis, Inc., 739 F.2d 1434, 1436 (9th Cir. 1984) ("Summary judgment is generally inappropriate when

<sup>&</sup>lt;sup>8</sup> A duty to disclose does not arise just because information is material. *See Matrixx Initiatives*, *Inc. v. Siracusano*, 563 U.S. 27, 44-45 (2011) (stating that "§ 10(b) and Rule 10b-5(b) do not create an affirmative duty to disclose any and all material information"); *see also In re Time Warner Inc. Sec. Litig.*, 9 F.3d 259, 267 (2d Cir. 1993) (stating that "a corporation is not required to disclose a fact merely because a reasonable investor would very much like to know that fact").

<sup>&</sup>quot;A duty to affirmatively disclose may arise when there is insider trading, a statute requiring disclosure, or . . . an inaccurate, incomplete or misleading prior disclosure." *City of Monroe Emps. Ret. Sys. v. Bridgestone Corp.*, 399 F.3d 651, 669 (6th Cir. 2005); *see also Time Warner*, 9 F.3d at 268 (stating that "one circumstance creating a duty to disclose arises when disclosure is necessary to make prior statements not misleading").

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mental state is an issue, *unless no reasonable inference supports the adverse party's claim*." (emphasis added)). Stated another way, if no reasonable person could deny that the statement was materially misleading, a defendant with knowledge of the relevant facts cannot manufacture a genuine issue of material fact merely by denying (or intentionally disregarding) what any reasonable person would have known.

Platforms Wireless, 617 F.3d at 1094.

According to Mr. Littleton, there is no genuine dispute that the following four representations, all made by Mr. Musk, were false or misleading and made with the requisite scienter:

- "Am considering taking Tesla private at \$420. Funding secured." This was the first tweet sent by Mr. Musk on 8/7/2018.
- "Investor support is confirmed." This was another tweet sent by Mr. Musk on 8/7/2018.
- "Only reason why this is not certain is that it's contingent on a shareholder vote."

  This statement was part of the same tweet immediately above.
- "I have continued to communicate with the Managing Director of the Saudi fund. He has expressed support for proceeding subject to financial and other due diligence and their internal review process for obtaining approvals. He has also asked for additional details on how the company would be taken private, including any required percentages and any regulatory requirements." This was part of the 8/13/2018 blog post on Tesla's website. Mr. Littleton contends that this statement was misleading because it omitted the fact that there had been conflict between Mr. Musk and Mr. Al-Rumayyan.

## 1. "Am considering taking Tesla private at \$420. Funding secured."

There is no real dispute here that the focus should be on the second part of the tweet, *i.e.*, "Funding secured." With respect to this phrase, Mr. Littleton does not claim that the Saudi PIF did not have sufficient funds to take Tesla private. Rather, Mr. Littleton claims that the statement "Funding secured" was false or, at the very least, misleading because the PIF had not, in fact, put up the money to take Tesla private, nor had it made any kind of legal or binding commitment to

provide any money.

To the extent Mr. Littleton suggests that "Funding secured" would necessarily be interpreted as there being a legal or binding commitment, *see* Mot. at 17, 20 (noting, *e.g.*, that the financial advisor Mr. Durban (of Silver Lake) has used the term "secured" to mean binding legal contracts committing capital), that is too narrow a reading. However, as the Court has previously noted, the use of the term "secured" does suggest that funding was not something amorphous or speculative but rather fairly concrete and reasonably certain. *See In re Tesla Sec. Litig.*, 477 F. Supp. 3d 903, 924 (N.D. Cal. 2020) (in prior order, stating that, "[b]ecause Mr. Musk, the CEO of Tesla, included the highly-specific price of \$420 at which shares would be bought for the going-private transaction, and because his tweet followed with 'funding secured,' a reasonable investor would have interpreted it as something more than a speculative amorphous opinion about future possibilities[;] [i]nstead, it can be read as implying a more concrete state of affair"). This is consistent with the dictionary definition of the term "secure" – *e.g.*, "to put beyond hazard of losing or of not receiving: GUARANTEE." <a href="https://www.merriam-webster.com/dictionary/secure">https://www.merriam-webster.com/dictionary/secure</a> (last visited 3/31/2022).

Based on the evidence of record, the Court finds that no reasonable jury could find the statement "Funding secured" accurate and not misleading. The evidence of record shows that there was nothing concrete about funding coming from the PIF; rather, discussions between Tesla and the PIF were clearly at the preliminary stage. There had been no discussion about what the purchase price would be for a share of stock. Nor had there been any discussion about what percentage of the company the PIF would own or the total amount of money the PIF would contribute. Moreover, both at the conclusion of the 7/30/2018 meeting between Tesla and the PIF and thereafter, the PIF asked Tesla to provide information so that the PIF could make an assessment. For example, Mr. Ahuja admitted that, at the end of the 7/30/2018 meeting, the PIF told Mr. Musk that it "was fundamentally keen on hearing from Elon directly the structure that he would have in mind that he would like to do for a going-private transaction and what percentage of that he would think would be needed or the financial calculations to take it private." Ahuja Depo. at 97-98; see also Ex. 80 (notes/minutes written by Mr. Al Mogren of the Saudi PIF)

(writing that Mr. Al-Rumayyan said, "I would like to listen to your plan Elon and what are the financial calculations to take it private in the next week and if I did not receive anything I will call you").

Defendants protest that "Funding secured" is too ambiguous in meaning and therefore the matter should not be decided at summary judgment but rather should be left for the jury to resolve. As indicated above, the Court acknowledges that there is some softness to the term "secured." But even accepting that there is some room for disagreement as to precisely how secure something must be before the term may be appropriately used, the term is not so elastic as to escape any real meaning. No reasonable jury could find "Funding secured" accurate and not misleading even under a liberal understanding of the term "secured." Notably, even the evidence on which Defendants rely suggests that the public understood the phrase "Funding secured" to mean (1) at least a verbal commitment (2) based on a discussion of at least some details about what funding would entail. For example, the Evercore report issued the day after the tweet stated as follows.

Could this happen? It is important to note that, as of today, no details have been provided with regards to what "Funding secured" means, who is providing that funding and what any potential funding structure might look like. Our view is that "Funding secured" should be interpreted as a strong verbal commitment, with funds available and parties willing to execute quickly. However, it could be less than this. It may also be that initial legal documents, term sheets, letters of intent have been signed.

Ex. 33 (Evercore report) (bold in original). Notably, although the report acknowledged that details about the funding had not been provided publicly, it assumed that there had been some discussion of details. Mr. Littleton's evidence indicates the same. *See, e.g.*, McCall Reply Decl., Ex. U (Bank of America/Merrill Lynch article) (noting that "no theoretical transaction method, funding plan, or structure was outlined," but "we view today's announcement as having substance given what appears to be at least three potential sources of capital (existing shareholders, Saudi Sovereign Wealth Fund, Chinese government and investment funds)" and "[f]urther credence was added with potential details in Musk's subsequent tweets regarding the setup of 'special purpose fund' for existing investors to remain involved, commentary that no single shareholder would have control, and that he would remain on as CEO"); Ex. 15 (J.P. Morgan report) (stating that, "as

lacking as the statements are in any details regarding who is expected to provide the required

amount of financing and on what terms, they are nevertheless declarative statements from the CEO of a public company which we feel should be considered seriously").

Accordingly, the Court concludes that Mr. Littleton is entitled to partial summary judgment with respect to the falsity of the phrase "Funding secured." The Court now turns to the issue of scienter. The question is whether there is a genuine dispute of fact as to whether Mr. Musk made this statement knowing it was false or with recklessness as to the falsity of the statement. The Court concludes that a reasonable jury could reach only one conclusion – *i.e.*, that Mr. Musk recklessly tweeted to the public that funding was secured. There is no dispute that, at the time of the tweet, Mr. Musk knew all of the facts relating to Tesla's interaction with the PIF. He was part of the 7/31/2018 meeting between the PIF and Tesla. And when a "defendant is aware of the facts that made the statement misleading, 'he cannot ignore the facts and plead ignorance of the risk'" of misleading others. *Platforms Wireless*, 617 F.3d at 1094. The Court therefore affords no weight to Mr. Musk's statement in his blog post of 8/13/2018 that he used the phrase "Funding secured" because he "left the July 31st meeting with no question that a deal with the Saudi sovereign fund could be closed, and that it was just a matter of getting the process moving." Ex. 16 (website).

## 2. "Investor support is confirmed."

As an initial matter, the Court notes that the full tweet stated as follows: "Investor support is confirmed. Only reason why this is not certain is that it's contingent on a shareholder vote." Mr. Littleton has broken the tweet into two separate challenges. The second sentence is discussed below.

The second sentence, however, has bearing on the first sentence. It reflects that Mr. Musk was making a distinction between "investor" and "shareholder"; in other words, "investor" referred to the person or entity wanting to invest in Tesla whereas "shareholder" referred to already existing investors. So understood, the statement "Investor support is confirmed" is false

<sup>&</sup>lt;sup>9</sup> Even if a reasonable jury could understand "investor support" to mean already existing investors, Defendants would fare no better. The record is clear that Mr. Musk did not reach out to existing

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and misleading for essentially the same reasons as stated above. That is, no reasonable could conclude that support from the Saudi PIF was confirmed given the preliminary nature of the discussions between the PIF and Tesla. In addition, a reasonable jury could reach only one conclusion regarding scienter: that Mr. Musk made his statement recklessly. As noted above, Mr. Musk was in fully aware of the facts given his participation in the 7/31/2018 meeting with the PIF.

#### 3. "Only reason why this is not certain is that it's contingent on a shareholder vote."

For the third statement (from the same tweet immediately above dated 8/7/2018), the Court must first take into account the full context. See McMahan & Co. v. Wherehouse Entm't, 900 F.2d 576, 579 (2d Cir. 1990) (indicating that statements should not be taken in isolation; asking "whether defendants' representations, taken together and in context, would have mislead a reasonable investor"); cf. In re Convergent Techs. Sec. Lit., 948 F.2d 507, 512 (9th Cir. 1991) (noting that "[s]ome statements, although literally accurate, can become, through their context and manner of presentation, devices which mislead investors"). A copy of the tweet is below.



Ex. 13.

The above indicates that "this" refers to "Taking Tesla Private." There is also a link to the 8/7/2018 blog post where Mr. Musk commented, *inter alia*, as follows:

Earlier today, I announced that I'm considering taking Tesla private

shareholders to get their views on taking the company private until after the above tweet was sent out.

at a price of \$420/share. I wanted to let you know my rationale for this, and why I think this is the best path forward.

First, a final decision has not yet been made, but the reason for doing this is all about creating the environment for Tesla to operate best. As a public company, we are subject to wild swings in our stock price that can be a major distraction for everyone working at Tesla, all of whom are shareholders. Being public also subjects us to the quarterly earnings cycle that puts enormous pressure on Tesla to make decisions that may be right for a given quarter, but not necessarily right for the long-term. Finally, as the most shorted stock in the history of the stock market, being public means that there are large numbers of people who have the incentive to attack the company.

. . . .

Here's what I envision being private would mean for all shareholders, including all of our employees.

First, I would like to structure this so that all shareholders have a choice. Either they can stay investors in a private Tesla or they can be bought out at \$420 per share, which is a 20% premium over the stock price following our Q2 earnings call (which had already increased by 16%). My hope is for all shareholders to remain, but if they prefer to be bought out, then this would enable that to happen at a nice premium.

. . . .

Finally, this has nothing to do with accumulating control for myself. I own about 20% of the company now, and I don't envision that being substantially different after any deal is completed.

Basically, I'm trying to accomplish an outcome where Tesla can operate at its best, free from as much distraction and short-term thinking as possible, and where there is as little change for all our investors, including all of our employees, as possible.

This proposal to go private would ultimately be finalized through a vote of our shareholders. . . .

Ex. 12 (website).

Defendants argue that the blog post above raises at least a question of fact as to how a reasonable person would view the statement "Only reason why this is not certain is that it's contingent on a shareholder vote." The Court is not persuaded. While the blog post makes clear that a final decision on taking Tesla private had not been made, it did not specify any contingencies other than the "finaliz[ation] through a vote of our shareholders." Ex. 12. Thus, a reasonable investor could *only* conclude that the sole contingency left for taking Tesla private was

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a shareholder vote. The post used the word "only," implying that the only contingency was a shareholder vote, not, e.g., uncertainty of investor support.

Accordingly, the Court finds that no reasonable jury could find the statement accurate and not misleading as there were, in fact, a number of contingencies that had to be addressed before the matter could reach a shareholder vote, including but not limited to the laundry list of items identified by Mr. Littleton: to wit, a determination of the terms and structure to take Tesla private and investor agreement therewith, the hiring of financial and legal advisors, a formal proposal for the Board to review, a negotiation with independent directors, the preparation of legal and financial analysis and documentation, the signing of an agreement, the hiring of proxy advisors, and the filing of regulatory approvals. To the extent Defendants contend Mr. Musk's blog post of 8/13/2018 provided information about contingencies, that argument is beside the point – at least for purposes of the summary judgment motion. At this juncture, Mr. Littleton is simply asserting that the statement at issue was false at the time it was made. See Reply at 12.

Finally, as above, the scienter analysis follows the falsity analysis. No reasonable jury could find that Mr. Musk did not act recklessly given his clear knowledge of the discussions that took place at the 7/31/2018 meeting.

4. "I have continued to communicate with the Managing Director of the Saudi fund. He has expressed support for proceeding subject to financial and other due diligence and their internal review process for obtaining approvals. He has also asked for additional details on how the company would be taken private, including any required percentages and any regulatory requirements."

The final statement comes from Mr. Musk's blog post of 8/13/2018. Here, Mr. Littleton contends falsity (as well as scienter) because, "[w]hile Musk wrote about his conversations with the Saudi PIF at length, he did not disclose that over the previous weekend he had sought to end all negotiations with the Saudi PIF." Mot. at 23. In other words, "[t]he August 13, 2018 blogpost deliberately omitted the conflict between Musk and Al-Rumayyan to give a misleading impression of an orderly and planned process for taking Tesla private." Reply at 13.

The Court denies summary judgment on this statement. As noted above, "a statement is

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misleading if it would give a reasonable investor the impression of a state of affairs that differs in a material way from the one that actually exists." Retail, 845 F.3d at 1275 (internal quotation marks omitted). Here, there was clearly some friction between Mr. Musk and Mr. Al-Rumayyan. See, e.g., Ex. 121 (Mr. Musk texting, inter alia, as follows: "There are many other investment funds who want to be part of this deal. We do not need your fund to get this done. I will not work with an organization who's [sic] public statement to the media do[es] not match their private statements to me and my team"; also texting: "In light of these actions and nothing meaningful done to correct them, Tesla will be moving forward with Silver Lake, Goldman and other investors to take Tesla private"). However, it appears that that same day the two resolved their dispute. See Ex. 121 (Mr. Al-Rumayyan texting, "I will ask Shihana to call Sam so they can work on PIF statement" and Mr. Musk responding, "Thank you. This means a great deal"). Thus, a reasonable jury could well find that the blog post did not give an impression of a state of affairs that was materially different from the one that actually existed.

#### Reliance D.

Finally, Mr. Littleton argues that he is entitled to summary judgment on the element of reliance. Because the Court is denying summary judgment on the fourth statement, it considers only reliance on the first three statements at issue.

> The reliance element "ensures that there is a proper connection between a defendant's misrepresentation and a plaintiff's injury." "The traditional (and most direct) way a plaintiff can demonstrate reliance is by showing that he was aware of a company's statement and engaged in a relevant transaction – e.g., purchasing common stock – based on that specific misrepresentation."

... [H]owever, [the Supreme Court has] recognized that requiring such direct proof of reliance "would place an unnecessarily unrealistic evidentiary burden on the Rule 10b-5 plaintiff who has traded on an impersonal market."...

[The Court] also noted that "[r]equiring proof of individualized reliance" from every securities fraud plaintiff "effectively would . . . prevent[] [plaintiffs] from proceeding with a class action" in Rule 10b-5 suits.

Halliburton Co. v. Erica P. John Fund, Inc., 573 U.S. 258, 267-68 (2014). Thus, the Supreme Court has held that, instead of having direct proof of individualized reliance on a

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misrepresentation, a plaintiff can establish a rebuttable presumption of reliance based on the fraud-
on-the-market doctrine. Under the doctrine, there is a rebuttable presumption of reliance where
"(1) the alleged misrepresentations were publicly known, (2) they were material, (3) the stock
traded in an efficient market, and (4) the plaintiff traded the stock between when the
misrepresentations were made and when the truth was revealed." Id. at 268. The doctrine

"is based on the hypothesis that, in an open and developed securities market, the price of a company's stock is determined by the available material information regarding the company and its business. . . . Misleading statements will therefore defraud purchasers of stock even if the purchasers do not directly rely on the misstatements."

Basic, 485 U.S. at 241-42; see also In re Allstate Corp. Secs. Litig., 966 F.3d 595, 600, 605 (7th Cir. 2020) (noting that, under the doctrine, "plaintiffs may prove that the given securities traded in efficient markets in which prices reflect all publicly available information, including misrepresentations, and all investors were thus entitled to rely on that public information and pricing"; in other words, "if the securities in question trade on an efficient market, then the market itself provides the causal connection between a misrepresentation and the price of the stock").

The presumption of reliance can be rebutted by

"[a]ny showing that severs the link between the alleged misrepresentation and either the price received (or paid) by the plaintiff, or his decision to trade at a fair market price." So for example, if a defendant could show that the alleged misrepresentation did not, for whatever reason, actually affect the market price [i.e., no price impact], . . . then the presumption of reliance would not apply.

*Halliburton*, 573 U.S. at 269. Price impact, therefore, may be relevant to the issue of reliance (also known as transaction causation) and not just loss causation (which is a separate element of a 10b-5 claim). *See Allstate*, 966 F.3d at 609.

In *Basic*, where there were alleged misrepresentations about the possibility of a merger, the Supreme Court provided two examples of how defendants could show that the alleged misrepresentation had no price impact.

[First], if petitioners could show that the "market makers" were privy to the truth about the merger discussions here with Combustion, and thus that the market price would not have been

affected by their misrepresentations, the causal connection could be broken: the basis for finding that the fraud had been transmitted through market price would be gone. Similarly, if, despite petitioners' allegedly fraudulent attempt to manipulate market price, news of the merger discussions credibly entered the market and dissipated the effects of the misstatements, those who traded Basic shares after the corrective statements would have no direct or indirect connection with the fraud.

Basic, 485 U.S. at 248-49.

In the instant case, Mr. Littleton is relying on the fraud-on-the-market doctrine to establish reliance. Defendants argue that summary judgment on this theory is not appropriate because there is a genuine dispute with respect to whether the statements at issue were material. They also note that any presumed reliance could be rebutted and contend that, here, there is a question of fact as to whether the alleged misrepresentation actually affected the stock price.

For purposes of the pending motion, the Court assumes that the three statements at issue were material, *i.e.*, because a reasonable investor would have viewed the statements as having significantly altered the total mix of information made available. *See Halliburton*, 573 U.S. at 278; *Basic*, 485 U.S. at 232. Certainly, there is evidence to support materiality because Tesla's stock price went up after the tweets, analysts issued reports commenting on the tweets, and Tesla's investors reached out to Tesla after the tweets.

But even if there were materiality, that would only give Mr. Littleton the benefit of a presumption of reliance; Defendants are still entitled to rebut the presumption. At the very least, there is a question of fact precluding summary judgment because, as Defendants have noted, there is evidence suggesting that the misrepresentations did not actually affect the market price. Specifically, there is evidence that, after the 8/13/2018 blog post, which served as a partial corrective disclosure, there was no decline or at least not a significant decline in stock price; thus, arguably, the reaction to the tweets on 8/7/2018 was a response to Mr. Musk contemplating taking Tesla private and not to statements that, *e.g.*, funding was secured or investor support confirmed.

## III. <u>CONCLUSION</u>

For the foregoing reasons, the Court grants in part and denies in part Mr. Littleton's motion for partial summary judgment. The Court holds that, based on the evidence presented, there is no genuine dispute that the first three representations at issue were false and that Mr. Musk recklessly

made those representations. To that extent, the motion is granted. In all other respects, the motion for partial summary judgment is denied.

At this juncture, the Court provisionally files the entirety of this order under seal. The parties are directed to meet and confer to determine which specific portions of the order are in need of sealing. The parties shall submit a stipulation on sealing within two weeks of the date of this order.

This order disposes of Docket No. 352.

IT IS SO ORDERED.

Dated: April 1, 2022

EDWARD M. CHEN United States District Judge

# EXHIBIT S

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DEFENDANTS' OPPOSITION TO PLAINTIFF'S MOTION FOR PARTIAL SUMMARY JUDGMENT

Case No. 3:18-cv-04865-EMC

1		TABLE OF CONTENTS	<b>Page</b>
2			
3	PRELIMINA	RY STATEMENT	1
4	ISSUES TO I	BE DECIDED	2
5	STATEMEN	T OF MATERIAL FACTS	3
6	A.	The Public Investment Fund Has Long Desired to Take Tesla Private	3
7	B.	The PIF Agreed to Fund a Transaction to Take Tesla Private.	5
8	C.	Mr. Musk Discussed Going Private at \$420 with Tesla's Board	6
9	D.	Mr. Musk Discussed Going Private With His Financial and Legal Advisors	7
10	E.	Mr. Musk Disclosed the Potential Go-Private Transaction Publicly on August 7.	7
11	F.	Mr. Musk Spoke with Investors and Advisors	9
12 13	G.	Mr. Musk Confirmed His Understanding that Funding Was Secured in Numerous Communications with Mr. Al-Rumayyan.	11
14	Н.	Mr. Musk Updated Shareholders With Additional Information on August 13	12
15 16	I.	Given Shareholder Feedback, Mr. Musk Decided Tesla Should Remain Public.	13
17	LEGAL STA	NDARD	13
18	ARGUMENT	Γ	14
19	I. SUMI	MARY JUDGMENT SHOULD BE DENIED AS TO FALSITY	14
20	A.	Plaintiff Ignores Material Facts Showing it was Reasonable for Mr. Musk to State "Funding [Was] Secured" and "Investor Support [Was] Confirmed."	14
21 22	В.	Plaintiff Ignores Material Facts Showing That Mr. Musk's Statement Regarding a "Shareholder Vote" Was Not Misleading	17
23	C.	Plaintiff's New Argument that Discussions with the PIF Had Ended as of August 13, 2018 is Baseless.	18
24	II. SUMI	MARY JUDGMENT SHOULD BE DENIED AS TO SCIENTER	20
25	A.	Scienter is a Question for the Jury.	20
26   27	В.	There Is Ample Evidence that Mr. Musk Believed His Statements Were True.	20
28	III. SUMI	MARY JUDGMENT SHOULD BE DENIED AS TO RELIANCE	21
		-i- Case No. 3:18-cv-04 EFENDANTS' OPPOSITION TO PLAINTIFF'S MOTION FOR PARTIAL SUMMARY JUI	865-EMC OGMENT

## A. There is a Genuine Dispute of Fact Regarding Defendants' Ability to Rebut Any Fraud-On-The-Market Presumption......24 B. Case No. 3:18-cv-04865-EMC

DEFENDANTS' OPPOSITION TO PLAINTIFF'S MOTION FOR PARTIAL SUMMARY JUDGMENT

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### **TABLE OF AUTHORITIES** 1 2 **Page** Cases 3 *In re Allied Cap. Corp. Sec. Litig.*, 4 5 In re Allstate Corp. Sec. Litig., 6 Anderson v. Liberty Lobby, Inc., 7 Antonetti v. Skolnik, 8 In re Apple Computer Sec. Litig., 9 10 Basic Inc. v. Levinson, 11 Brody v. Transitional Hosps. Corp., 12 Buxbaum v. Deutsche Bank AG, 13 City of Dearborn Heights Act 345 Police & Fire Ret. Sys. v. Align Tech., Inc., 14 15 Davis v. Yelp, Inc., 16 Durning v. First Bos. Corp., 17 Ernst & Ernst v. Hochfelder, 18 Fecht v. Price Co., 19 20 U.S. v. Ferguson, 21 Garcia v. J2 Glob., Inc., 22 Gebhart v. S.E.C., 23 Halliburton Co. v. Erica P. John Fund, Inc., 24 Howard v. Everex Sys., Inc., 25 26 Hsingching Hsu v. Puma Biotechnology, Inc., 27 In re Infineon Techs. AG Sec. Litig., 28 Case No. 3:18-cv-04865-EMC

DEFENDANTS' OPPOSITION TO PLAINTIFF'S MOTION FOR PARTIAL SUMMARY JUDGMENT

1	Janus Cap. Grp., Inc. v. First Derivative Traders, 564 U.S. 135 (2011)
2	In re JDS Uniphase Corp. Sec. Litig., 2007 WL 2429593 (N.D. Cal. Aug. 24, 2007)
3 4	Jelinek v. Am. Nat'l Prop. & Cas. Co., 747 F. App'x 513 (9th Cir. 2018)
5	Kaplan v. Rose, 49 F.3d 1363 (9th Cir. 1994)
6	Livid Holdings Ltd. v. Salomon Smith Barney, Inc., 416 F.3d 940 (9th Cir. 2005)
7 8	Marucci v. Overland Data, Inc., 1999 WL 1027053 (S.D. Cal. Aug. 2, 1999)
9	Matrixx Initiatives, Inc. v. Siracusano, 563 U.S. 27 (2011)
0	McCrary v. Elations Co. LLC, 2014 WL 12561600 (C.D. Cal. Dec. 8, 2014)
	McGovney v. Aerohive Networks, Inc.,         2019 WL 8137143 (N.D. Cal. Aug. 7, 2019)         21
2   3	No. 84 EmpTeamster Joint Council Pension Tr. Fund v. Am. W. Holding Corp., 320 F.3d 920 (9th Cir. 2003)
4	<i>Oran v. Stafford</i> , 226 F.3d 275 (3d Cir. 2000)
5	Reese v. BP Expl. Inc., 643 F.3d 681 (9th Cir. 2011)
	In re REMEC Inc. Sec. Litig., 702 F. Supp. 2d 1202 (S.D. Cal. 2010)
[7] [8]	S.E.C. v. Bankatlantic Bancorp, Inc., 661 F. App'x 629 (11th Cir. 2016)
9	S.E.C. v. Jasper, 2009 WL 10701938 (N.D. Cal. Dec. 10, 2009)
20	S.E.C. v. Phan, 500 F.3d 895 (9th Cir. 2007)
21	S.E.C. v. Platforms Wireless Int'l Corp., 617 F.3d 1072 (9th Cir. 2010)
22	S.E.C. v. Sourlis, 851 F.3d 139 (2d Cir. 2016)
23   24	S.E.C. v. Todd, 642 F.3d 1207 (9th Cir. 2011)
25	In re Skechers USA, Inc. Sec. Litig., 444 F. Supp. 3d 498 (S.D.N.Y. 2020)
26	In re Sun Microsystems Sec. Litigation,
27	1992 WL 226898 (N.D. Cal. July 10, 1992)
28	17, 11. Supp. 30 703 (13.D. Sui. 2020)

1	TSC Indus., Inc. v. Northway, Inc., 426 U.S. 438 (1976)
2	In re Twitter, Inc. Sec. Litig., 2020 WL 4187915 (N.D. Cal. Apr. 17, 2020)
3 4	In re Volkswagen, 2017 WL 6041723 (N.D. Cal. Dec. 6, 2017)
5	Vucinich v. Paine, Webber, Jackson & Curtis, Inc.,         739 F.2d 1434 (9th Cir. 1984)
6	Washtenaw Cty. Employees' Ret. Sys. v. Walgreen Co.,
7	2021 WL 5083756 (N.D. Ill. Nov. 2, 2021)
8	Rules and Regulations  Fed. R. Civ. P. 56(a)
9	Fed. R. Civ. P. 36(a)
0	
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6	
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	Case No. 2:18 ov 04865 EMC

## MEMORANDUM OF POINTS AND AUTHORITIES

## PRELIMINARY STATEMENT

Plaintiff has litigated this case for nearly three years, taken numerous depositions, received hundreds of thousands of pages of documents, and now must contend with one basic truth: Elon Musk's August 7, 2018 tweet informing the public that he was considering taking Tesla private was entirely truthful and cannot support the claims that Plaintiff brings—much less a motion for summary judgment. Mr. Musk was considering taking Tesla private at \$420 a share. Funding was secured. There was investor support. These conclusions are supported by extensive contemporaneous evidence, including discussions with Saudi Arabia's sovereign wealth fund (the "PIF") and Tesla's Board, as well as the undisputed fact that there was sufficient funding for a go-private transaction, from the PIF or otherwise. Plaintiff ignores all of this, ignores what Mr. Musk actually said (and when), ignores what Mr. Musk truly believed, and instead creates strawman arguments that overlook large swaths of evidence adduced during discovery. Far from "fraud," Mr. Musk's statements were an effort to be open about a potential go-private transaction and to provide equal information to all Tesla shareholders. Plaintiff has no valid claims, never mind ones that can be decided in his favor on summary judgment. Plaintiff's transparent attempt to avoid a trial on the merits should be rejected, and the Court should deny Plaintiff's motion in its entirety.

To obtain summary judgment, a plaintiff must show that there are *no* disputes as to *any* material facts. A plaintiff cannot cherry pick certain facts and sweep the remaining inconvenient and unhelpful facts under the rug. But that is precisely what Plaintiff does here, disregarding material facts demonstrating, among other things, that: (1) the PIF had expressed its desire to fund a Tesla goprivate transaction for years; (2) the PIF acquired 5% of Tesla stock leading up to a July 2018 meeting; (3) at the meeting, the PIF's decisionmaker, Yasir Al-Rumayyan, again expressed the PIF's desire to fund a Tesla go-private transaction, including saying expressly, "I am the decision maker. So long as the Crown Prince supports me, and he does, that's it. *It's done*."; (4) the PIF had the resources to fund a go-private transaction, with Mr. Al-Rumayyan saying "it's not a problem"; (5) Mr. Musk believed that funding was secured with the PIF, as evidenced by numerous contemporaneous non-public statements by Mr. Musk, including to Mr. Al-Rumayyan directly; and (6) Mr. Musk's advisors

confirmed sufficient funding would be available from sources even outside the PIF.

These material facts go to the key elements of Plaintiff's claims, and Plaintiff does not say a word about them. "A fact is material if it *might* affect the outcome of the case." *Jelinek v. Am. Nat'l Prop. & Cas. Co.*, 747 F. App'x 513, 514 (9th Cir. 2018) (emphasis added). The material facts detailed herein relate directly to the alleged falsity of Mr. Musk's statements and thus must be evaluated by the jury. Moreover, the facts demonstrate that Mr. Musk believed his statements were true. Countless courts—including this Court—have held that "[g]enerally, scienter should not be resolved by summary judgment" and have denied summary judgment on that basis. *Davis v. Yelp, Inc.*, 2021 WL 4923359, at \*13 (N.D. Cal. Sept. 17, 2021) (Chen, J.). This is because "materiality and scienter are both fact-specific issues which should ordinarily be left to the trier of fact." *Id.* 

Plaintiff's motion on the element of reliance fares no better. Plaintiff cannot obtain summary judgment on reliance without first establishing that Mr. Musk's alleged misstatements were material. But materiality is a question for the jury (*see, e.g., Durning v. First Bos. Corp.*, 815 F.2d 1265, 1268 (9th Cir. 1987)), and it is easy to see why. It is not enough to point out that Tesla's stock price moved after Mr. Musk's statements, as Plaintiff does here. That movement could have been caused by Mr. Musk's *other* indisputably true statements (e.g., that he was considering taking Tesla private or that the PIF had heavily invested in Tesla). Indeed, when Mr. Musk disclosed further details concerning the discussions about funding after his initial tweets, Tesla's stock price hardly moved, suggesting that the alleged misstatements were not material. Plaintiff has not even attempted to meet his burden on this necessary element. This too is a question for the jury, not summary adjudication.

Defendants respectfully request that the Court deny Plaintiff's motion in its entirety.

## **ISSUES TO BE DECIDED**

(1) Numerous courts, including this one, have recognized that scienter is a question for the jury. Plaintiff in this case ignores the abundance of documentary and contemporaneous evidence demonstrating that Mr. Musk was considering taking Tesla private, that a premium of 20% over the

<sup>&</sup>lt;sup>1</sup> *Howard v. Everex Sys., Inc.*, 228 F.3d 1057, 1060 (9th Cir. 2000); *In re Volkswagen*, 2017 WL 6041723, at \*12 (N.D. Cal. Dec. 6, 2017); *S.E.C. v. Jasper*, 2009 WL 10701938, at \*3 (N.D. Cal. Dec. 10, 2009); *In re Twitter, Inc. Sec. Litig.*, 2020 WL 4187915, at \*12 (N.D. Cal. Apr. 17, 2020).

share price was reasonable, that funding was secured at the time of the tweet, and that there was investor support for the transaction. Should the Court deny partial summary judgment on falsity and scienter where the evidence creates numerous triable issues of fact?

(2) The rebuttable fraud-on-the-market presumption requires Plaintiff to prove that the alleged misrepresentations were material. Plaintiff argues that Mr. Musk's statement "funding secured" was material because Tesla's stock price changed following the statement, but ignores that Mr. Musk made *other* indisputably true statements that could account for stock price changes (e.g., "am considering taking Tesla private"). Days later, Mr. Musk clarified what "funding secured" meant and Tesla's stock price hardly moved. Should the Court deny partial summary judgment on the element of reliance where Plaintiff has not attempted to prove the materiality of the challenged statements?

## STATEMENT OF MATERIAL FACTS

### A. The Public Investment Fund Has Long Desired to Take Tesla Private.

The PIF is Saudi Arabia's sovereign wealth fund. (Batter Decl., Ex. A.)<sup>2</sup> The PIF's purpose is to provide financing support for strategic projects on behalf of the Saudi government. (*Id.*) As of August 2018, it was reported to have \$225 billion in assets. (*Id.*) As part of the Saudi government's efforts to "transform Saudi Arabia from a staid petrostate to a technology-focused economy" (*id.*), the PIF has tried to convince Mr. Musk to take Tesla private for years. (Ex. B at 277:2-20; Ex. P at 68:22-70:23; Ex. Q at 30:7-31:6, 51:2-52:19, 55:4-10.) At multiple meetings between Mr. Musk and Mr. Al-Rumayyan, the PIF's Managing Director, Mr. Al-Rumayyan expressed a desire not only to invest substantial sums in Tesla, but to fund a take-private transaction. (Ex. B at 277:2-20 ("From the very beginning, the very first interaction was about a take private.").) Sam Teller, Mr. Musk's then-Chief of Staff, was present at these meetings and confirmed that the purpose was to discuss taking Tesla private. (Ex. C at 74:11-15, 129:3-130:23, 133:5-8; Ex. P at 74:2-76:7, 77:8-14, 80:24-81:13, 82:9-13, 83:10-84:3, 88:9-18, 92:15-93:6, 94:21-95:1, 100:2-20, 107:15-109:15, 110:9-15.)<sup>3</sup> Deepak Ahuja,

<sup>&</sup>lt;sup>2</sup> Deposition exhibits are marked with numbers (e.g., 1-400); new exhibits in support of this opposition are marked with letters (e.g., A-Z). All cited exhibits are to the Batter Declaration.

<sup>&</sup>lt;sup>3</sup> Likewise, Mr. Musk believed—and expressed publicly—that Tesla would operate more efficiently as a private company, benefiting its employees and shareholders. (Ex. D.)

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Tesla's former Chief Financial Officer, was similarly present during a meeting where "the concepts of taking Tesla private were discussed [with the PIF]." (Ex. Q at 55:4-21.)

The PIF's pursuit to convince Mr. Musk to take Tesla private began in November 2016 when Mr. Al-Rumayyan first sought a meeting with the Tesla chairman and CEO, but Mr. Musk was unavailable. (Ex. 105.) The PIF reached out again in early 2017, and Mr. Al-Rumayyan met Mr. Musk on January 31, 2017. (Ex. 106; Ex. C at 129:5-16.) The express purpose of the meeting was "to discuss the possibility of them working with us to take Tesla private." (Ex. C at 130:12-16.) At that meeting, Mr. Al-Rumayyan expressed great interest and excitement in taking Tesla private and working with Mr. Musk. (*Id.* at 134:25-135:11.) Eager to close the deal, Mr. Al-Rumayyan directed the PIF's Director of Investment to follow up with Tesla to "take the conversation forward." (Ex. 76 at 5.) Soon thereafter, on March 7, 2017, Mr. Al-Rumayyan met Mr. Musk at Tesla's factory in California. (Ex. E at 62:23-67:10; Ex. Q at 30:7-31:6.) Masayoshi Son, the CEO of SoftBank, also attended. (Id.) At the dinner meeting, the group discussed an investment that would allow Tesla to go private. (Id.) They also discussed the potential capital required, estimating that \$30-60 billion would be needed. (*Id.*; see also Ex. Q at 51:2-53:17.) Mr. Al-Rumayyan expressed that the PIF could easily provide the funding necessary. (Id.) During these discussions, Mr. Musk expressed interest in the potential transaction and conveyed that going private would enable Tesla to better focus on its longterm strategy. (Ex. E. at 71:3-10.) Mr. Al-Rumayyan and Mr. Musk met again on May 1, 2017 to discuss the PIF's desire to fund a transaction to take Tesla private. (Ex. C at 150:23-151:7, 152:10-21, 154:4-155:8; Exs. F, G, H.)

Over the next several months, Mr. Musk had further discussions with Mr. Al-Rumayyan about a take-private transaction for Tesla, and Mr. Al-Rumayyan reiterated his interest in closing the deal. (Ex. C at 152:15-21; Ex. B at 278:18-20 ("[R]eally in every meeting Mr. Al-Rumayyan had been, we want to help you take the company private.").) Although Mr. Musk remained interested in taking Tesla private, he had grown more skeptical about the possibility of working with the PIF due to his belief at the time that the PIF and SoftBank would necessarily be partners in that transaction. (Ex. C at 152:22-153:20; Ex. B at 278:20-279:1.) Mr. Musk was hesitant to work with Masayoshi because his interactions with him left Mr. Musk with the impression that Masayoshi did not understand Tesla's

mission. (Ex. C at 160:20-161:9; Ex. Q at 33:14-35:8.) Because of Mr. Musk's reluctance to include Masayoshi in the negotiations, Mr. Musk pulled back from pursuing a transaction with the PIF in the first half of 2018. (*Id.*) Nevertheless, Mr. Musk encouraged the PIF to demonstrate its commitment to Tesla by purchasing Tesla stock in the open market. (Ex. C at 169:15-19.)

### B. The PIF Agreed to Fund a Transaction to Take Tesla Private.

The PIF contacted Mr. Musk again in July 2018 to request another meeting. (Ex. 109.) On July 31, Mr. Musk and Mr. Teller met with Mr. Al-Rumayyan and his colleagues at the Tesla factory. (Ex. B at 108:2-21.) Mr. Al-Rumayyan informed Mr. Musk that the PIF had already invested billions of dollars in Tesla—acquiring roughly five percent of the company. (*Id.* at 113:1-5.) Mr. Musk, surprised to learn this, told Mr. Al-Rumayyan he was under the impression that Mr. Al-Rumayyan had delegated the responsibility of investing in Tesla to Masayoshi. (*Id.* at 114:4-115:7.) Mr. Al-Rumayyan said, "definitely not" and explained that "the only thing that was limiting them at 5 percent was the reporting requirement[,] [a]nd they wished to have a much larger stake and wanted to help Tesla go private." (*Id.*) Mr. Al-Rumayyan reiterated that "he had wanted to do so from the very beginning," since their first meeting in January 2017. (*Id.*)

Given the import of Mr. Al-Rumayyan's proposal, Mr. Musk asked whether any other decision-makers were needed to move forward with a transaction. (*Id.* at 115:16-21.) Mr. Al-Rumayyan said, "*No, that's the advantage of PIF. I am the decision maker. So long as the Crown Prince supports me, and he does, that's it. It's done.*" (*Id.* (emphasis added); *see also* Ex. O at 89:19-22, 92:12-22, 93:11-94:9, 99:17-100:5, 100:11-101:8, 102:2-10, 102:18-20, 103:1-15, 107:22-108:1, 109:17-110:7, 113:6-7, 221:2-14.) Mr. Musk understood Mr. Al-Rumayyan to be offering to purchase up to all outstanding Tesla shares other than those owned by Mr. Musk, or roughly 80 percent of the common stock. (Ex. B at 120:9-20.) But Mr. Musk did not think nearly this much capital would be required, as he believed that a majority of Tesla shareholders would want to remain with the private company. (*Id.*) Mr. Teller then met Mr. Ahuja outside the meeting room and told him that the PIF expressed interest in taking Tesla private and that the conversations were getting serious. (Ex. Q at 77:3-79:9.) When Mr. Ahuja joined the meeting, Mr. Musk similarly told him, in the presence of Mr. Al-Rumayyan, that PIF was interested in taking Tesla private and had the funding

necessary to do so. (*Id.* at 84:2-86:8.)

As the meeting wrapped up, Mr. Al-Rumayyan emphasized to Mr. Musk how serious the PIF's proposal was: "[L]et us know how you want to do this. We want to do this." (Ex. B at 155:23-156:1.) Mr. Al-Rumayyan was enthusiastic about the prospect of taking Tesla private and told Mr. Musk he would reach out in a week if he did not hear back. (Ex. P at 162:2-163:12.) Based on everything Mr. Musk knew at the time, including almost two years of lobbying by the Saudis, he had every reason to believe they were ready, willing, and able to fund a take-private transaction:

[T]hey were extremely clear that they wanted to take Tesla private. . . . They had invested billions of dollars with no written agreement, no agreement of any kind, just as a good faith gesture to show that they're serious. And if I were to say what I wanted to do they would do it. So there was no question in my mind whatsoever that the funding was secure for this deal.

(Ex. B at 146:1-13 (emphasis added).) Other witnesses confirmed Mr. Musk's account of the discussions. (Ex. P at 132:19-136:6, 137:2-16, 140:8-22, 141:8-143:23, 144:15-145:13.) Mr. Teller recalled that when Mr. Musk mentioned the transaction would take a lot of capital, Mr. Al-Rumayyan responded, "it's not a problem." (Ex. C at 206:17-207:8.) Mr. Teller also recalled Mr. Al-Rumayyan saying that taking Tesla private was not just an investment, but a strategic priority for Saudi Arabia. (*Id.* at 216:23-217:11.) And Mr. Teller, like Mr. Musk, left the meeting with the understanding that "this was a handshake agreement to have the Saudis finance a private transaction for Tesla." (Ex. P at 161:7-162:1.)

Mr. Ahuja joined the meeting after Mr. Teller summoned him. (Ex. C at 194:21-204:7.) Based on the way Mr. Musk was acting, it was clear to Mr. Ahuja that Mr. Musk felt strongly that the PIF's offer was genuine. (Ex. E at 92:7-93:14.) Mr. Ahuja also testified that Mr. Musk often made significant business transactions based on a verbal commitment and a handshake. (*Id.* at 121:18-124:13.) Similarly, the PIF is well known for orally committing to transactions and moving quickly in making large investments. For example, the PIF orally agreed to commit \$45 billion to SoftBank's technology fund after a 45-minute conversation and similarly bought a \$3.5 billion stake in Uber within weeks of meeting its CEO. (Ex. A at 5-6.)

### C. Mr. Musk Discussed Going Private at \$420 with Tesla's Board.

On August 2, 2018, Mr. Musk emailed Tesla's Board after the close of trading and proposed to

Rumayyan's proposal to fund a take-private transaction. (*Id.* at 132:6-15.)

take Tesla private for \$420 per share. (Ex. 81.) He arrived at the price by adding a 20 percent premium to the stock price and rounding up from \$419. (Ex. B at 192:10-14.) He expressed his "firm belief that Tesla can operate more effectively as a private company for the next several years." (Ex. 81.) He also emphasized that he supported "any shareholders who wish to remain shareholders of Tesla as a private company retaining their shares." (*Id.*) That evening, the Board held a meeting without Mr. Musk. (Ex. Q at 129:13-23.) Mr. Ahuja attended and briefed the Board on Mr. Al-

The Board held another meeting on August 3, this time including Mr. Musk. (Ex. B at 205:11-25.) Mr. Musk explained that the PIF was willing to fund the transaction. (*Id.* at 206:6-23.) Mr. Musk emphasized his desire to allow existing Tesla shareholders to remain with the company, if they wished to do so. (*Id.* at 208:11-20.) The Board agreed that Mr. Musk should reach out to large investors to see if they would remain in a private Tesla. (*Id.* at 212:13-23.) Mr. Musk believed that to avoid selective disclosure there would need to be a public disclosure first. (*Id.*)

# D. Mr. Musk Discussed Going Private With His Financial and Legal Advisors.

On August 3, Mr. Musk contacted Michael Dell to discuss his experience in taking Dell private. (Ex. B at 161:13-21.) Mr. Musk also spoke to Steve Rosenblum of Wachtell, who represented Mr. Dell in that transaction. (*Id.* at 162:7-11.) Mr. Musk asked him to be counsel on a potential take-private transaction. (*Id.* at 175:8-25.) On August 6, Mr. Musk also spoke with Egon Durban of Silver Lake regarding the transaction. (*Id.* at 167:5-12.) Mr. Musk told Mr. Durban that the PIF wanted to take Tesla private, but he would prefer to have a broader investor base. (*Id.* at 170:3-21.) Mr. Durban was confident many investors would be interested in participating. (*Id.*) Mr. Durban told Mr. Musk that the structure Mr. Musk was envisioning would be "a lot easier than what was done with Dell," and that if many investors retained their ownership, "the actual amount of capital needed to take it private may be relatively small compared to other deals." (*Id.* at 173:11-174:10.)

# E. Mr. Musk Disclosed the Potential Go-Private Transaction Publicly on August 7.

Mr. Musk did not want to take Tesla private if shareholders opposed the idea. (Ex. B at 100:13-17.) This presented an issue for Mr. Musk. He understood that the law limited his ability to speak with select shareholders about a potential transaction. (*Id.* at 213:13-24.) Mr. Musk therefore

decided that the best way to gauge investors' interest in his proposal was to make a public announcement. (*Id.*) Mr. Musk wanted "a fair playing field," where "[p]eople can make their own assessment about whether there would be a take private at a premium or not." (*Id.*) Mr. Musk planned to do an after-hours disclosure on the night of August 7 or 8. (*Id.* at 219:24-220:6.) Mr. Musk reasoned that certain "salient points" should be included in the disclosure:

I strongly believed [it] to be the case that funding was certain and that the reasonable price to do this at was \$420. . . . So it just seems as though there were three salient points that were necessary for all cards to be on the table. "Funding secured," the price conveyed to the board and that . . . I'm considering taking the company private.

(*Id.* at 233:22-234:8; Ex. O at 187:15-21, 195:6-25.)

On August 7 at 9:18 a.m., the *Financial Times* reported that the PIF had acquired a \$2 billion stake in Tesla. (Ex. 225.) Tesla's stock immediately began to rise sharply. Mr. Musk was concerned about the leak. (Ex. B at 220:7-221:2.) Given that the PIF had just told Mr. Musk they wanted to take Tesla private, he worried that whoever had leaked the investment would also leak the PIF's interest in taking Tesla private and that such a leak might include *inaccurate* information that could cause confusion in the market (e.g., if the article stated that Mr. Musk had *committed* to taking Tesla private, or if it included purported deal terms). (Ex. O at 127:6-18, 128:15-25, 174:2-11, 182:17-24, 184:8-16, 185:1-18, 202:12-203:3, 281:4-7.) Mr. Musk felt obligated to disclose his consideration of a potential take private without delay so that all investors would receive the same information:

In the normal course of business we would have done an after-hours disclosure of take private. And I actually intended to do that on the Tuesday night of the tweet. . . . Then on Tuesday morning the news of the Saudi investment broke . . . , which like rang a huge alarm bell in my head. This is like, whoa, how is this information getting out there? . . . I thought that most likely if the Saudi news investment had leaked then probably the take private news is also leaking or at least is at great risk of leaking. And so it was like [I'm] going to make sure there's a fair playing field here. . . . [T]here's a few facts that need to be out there. And that is that I am considering taking Tesla private. In my view funding is secured. And the price that I proposed to the board was \$420. These seemed like critical facts for a level playing field for investors.

(Ex. B at 219:24-221:2.)

At 9:48 a.m., 30 minutes after the *Financial Times* report, Mr. Musk tweeted: "Am considering taking Tesla private at \$420. Funding secured." (Ex. 8.) Over the next few hours, in response to questions from his Twitter followers, Mr. Musk provided additional information, including his "hope

[that] \*all\* current investors remain with Tesla even if we're private," and that the rationale for the take-private transaction was that it would be "way smoother & less disruptive as a private company." (Exs. 10, 11.) Some investors interpreted "funding secured" consistently with what had occurred, as "a strong verbal commitment, with funds available and parties willing to execute quickly." (Ex. 33.)

Later that day, Mr. Musk emailed Tesla's employees, a copy of which was then posted on Tesla's blog, entitled "Taking Tesla Private." (Ex. 12.) Mr. Musk reiterated, "I'm considering taking Tesla private at a price of \$420/share," and went on to explain his rationale. (*Id.*) He added that, "a final decision has not yet been made," and the proposal "would ultimately be finalized through a vote of our shareholders." (*Id.*) Mr. Musk linked to this blog post on his Twitter account, including a short cover note: "Investor support is confirmed. Only reason why this is not certain is that it's contingent on shareholder vote." (Ex. 13.) "Investor support is confirmed" was intended to be "synonymous with 'funding secured'"; it reiterated Mr. Musk's view that there was "more than sufficient investor support to take the company private." (Ex. B at 249:21-250:3; Ex. O at 216:2-217:24.)

On the evening of August 7, Mr. Musk relayed to Mr. Ahuja the portion of the July 31 meeting that Mr. Ahuja had not attended. (Ex. E at 248:4-249:17.) Mr. Al-Rumayyan "very affirmatively" told Mr. Musk that he was the decision maker at the PIF to invest in the take-private transaction and he had the full support of the Crown Prince. (*Id.*) Mr. Musk told Mr. Ahuja that, based on Mr. Al-Rumayyan's statements, Mr. Musk believed the PIF had made a verbal commitment, which gave Mr. Musk confidence in tweeting "funding secured." (*Id.*) The next morning, before the market opened, Tesla's Board announced that Mr. Musk had opened a discussion about taking Tesla private, and that the Board was "taking the appropriate next steps to evaluate this." (Ex. 26.)

### F. Mr. Musk Spoke with Investors and Advisors.

Over the next several days, and consistent with his belief that shareholders should have a say, Mr. Musk spoke with several institutional investors. While Mr. Musk initially believed that most investors would want Tesla to go private, he eventually learned that they were, on average, "lukewarm" about the idea. (Ex. B at 258:23-259:12; Ex. O at 297:7-23.)

At the same time, Mr. Musk continued his discussions with Mr. Al-Rumayyan. On August 10, Mr. Al-Rumayyan told Mr. Musk that the transaction would have to be approved by certain

committees within the PIF. (Ex. C at 296:19-297:18.) Mr. Musk was surprised; after all, Mr. Al-Rumayyan told Mr. Musk at the July 31 meeting that he was the PIF's decision-maker and had the support of the Crown Prince. (*Id.*) Mr. Teller was equally surprised. (*Id.* ("[I]t was the first that I had heard of this and . . . as far as I understand the first that Elon had. . . . [T]his was inconsistent with what was communicated to us in the July 31st meeting.").) Mr. Musk conveyed to Mr. Al-Rumayyan that this was not what he understood from the July 31 meeting, and Mr. Al-Rumayyan apologized for the misunderstanding. (*Id.* at 298:8-299:2 ("I read it as a little bit of [Mr. Al-Rumayyan] almost covering his ass a little bit . . . he kind of fronted a little too hard in the [July 31] meeting about his unilateral power and . . . he was now forced to walk it back. Because, in fact, he was not . . . a unilateral decision maker.").) Mr. Al-Rumayyan reiterated that he was "unequivocal" about his desire to invest in Tesla. (*Id.*)<sup>4</sup>

Also on August 10, Mr. Musk met with Mr. Durban to discuss the take-private transaction. (Ex. 121 at 7.) The next day, Mr. Musk told the Board that he had engaged Mr. Durban to lead the

(Ex. 121 at 7.) The next day, Mr. Musk told the Board that he had engaged Mr. Durban to lead the deal team, had engaged Wachtell, and may also engage Munger Tolles. (Ex. 94.) Mr. Musk also met with investment bankers from Goldman Sachs. (Ex. 255.) On August 12, Mr. Musk texted Todd Maron, Tesla's then-General Counsel, and Mr. Durban: "Todd, I have engaged Silver Lake to lead the Tesla go-private initiative." (Ex. 182 at 9.) Two hours later, Mr. Durban confirmed to Mr. Musk that he had spoken to Mr. Maron and that a special committee was being formed. (*Id.* at 10.) Among other things, Silver Lake and Goldman Sachs confirmed that there was sufficient capital to fund a go-private transaction. (Ex. E at 240:16-243:20.) Multiple sources were willing to invest in Tesla in a take-private, including Silver Lake, the PIF, Google, and fund manager Ron Baron. (*Id.*)

<sup>&</sup>lt;sup>4</sup> As Plaintiff points out, Mr. Al-Rumayyan expressed a desire to have a Tesla production hub in Saudi Arabia; however, the PIF's willingness to fund Tesla's go-private transaction was never contingent on Tesla building such a factory. (Ex. O at 123:21-124:10; Ex. P at 114:22-115:12.)

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# G. Mr. Musk Confirmed His Understanding that Funding Was Secured in Numerous Communications with Mr. Al-Rumayyan.

In the days following his tweet regarding "funding [being] secured," and after news outlets began to question the PIF's level of involvement in the potential transaction, Mr. Musk communicated with Mr. Al-Rumayyan to confirm that the PIF had committed to fund Tesla to go private. Mr. Musk's non-public statements to Mr. Al-Rumayyan demonstrate his belief that funding *was* secured. (Ex. 121; Ex. O at 226:2-24, 234:8-21, 239:2-25, 240:15-242:22, 243:9-25, 251:15-21, 252:18-25, 254:4-255:4; 256:18-22, 258:8-20.)

Specifically, on August 10, 2018, Mr. Musk sent a text message to Mr. Al-Rumayyan expressing how important it was that he confirm his statements during their July 31 meeting that the PIF had committed to take Tesla private: "This is a major problem [i.e., speculation that the PIF did not agree to take Tesla private]. It is extremely important that you confirm that you are in discussions with me regarding the take private transaction." (Ex. 121 at 8.)<sup>5</sup> Two days later, Mr. Musk texted Mr. Al-Rumayyan a link to a Reuters article that speculated the PIF would not be funding Tesla's transaction to go private. (*Id.* at 10; Ex. 323.) Mr. Musk wrote, "This is false." "Please refute this false statement that PIF has no interest in Tesla. This is outrageous." (Ex. 121 at 10.) Mr. Musk then texted Mr. Al-Rumayyan a link to a Bloomberg article that stated that Tesla and the PIF were "in talks" regarding a go-private transaction. (*Id.*; Ex. 332.) Mr. Musk wrote, "This is an extremely weak statement and does not reflect the conversation we had at Tesla. You said you were definitely interested in taking Tesla private and had wanted to do so since 2016. You also made it clear that you were the decision-maker, moreover backed strongly by the Crown Prince, who regards this as strategically important at a national level." (Ex. 121 at 10 (emphasis added).)

Later that day, Mr. Musk wrote Mr. Al-Rumayyan, "when we met at Tesla recently, you said that you were the decision-maker for PIF, that you had wanted to do the Tesla take-private deal for two years, and that this was supported directly by the Crown Prince. I checked with my team who

<sup>&</sup>lt;sup>5</sup> On a phone call that same day, Mr. Al-Rumayyan was "clear and unequivocal about his intent with regard to doing the transaction, which was he and they remained totally excited, on board. Their intent to complete the transaction had not changed in any way." (Ex. P. at 242:24-244:12.)

were in that meeting in case I remembered something wrong and they confirmed this exactly." (Id.

at 11 (emphasis added).) Mr. Musk went on, "I will not work with an organization who's [sic] public

statement to the media do not match their private statements to me and my team." (Id. at 12.) The

Bloomberg article "makes me sound like a liar. It is filled with equivocation and in no way indicates

the strong interest you conveyed in person [i.e., that the PIF committed to fund the go-private

transaction]." (Id.) Mr. Musk continued, "I am sorry, but there will be no further communication

unless you fix the public perception of wishy washy support and interest from PIF. That is not what

you said to me and my team privately. Someone is either a friend or not a friend and no friend says

one thing privately [i.e., that the PIF committed to fund the go-private transaction] and another thing

publicly. This is not right." (Id.) Mr. Al-Rumayyan responded that he would "work on [a] PIF

statement" to fix the incorrect public perception. (Id.)

# H. Mr. Musk Updated Shareholders With Additional Information on August 13.

Before the markets opened on August 13, Mr. Musk posted an "Update on Taking Tesla Private" on Tesla's blog. (Ex. 16.) The post included additional details regarding, among other things, Mr. Musk's funding discussions with the PIF, the potential structure of the transaction, and the various actions that would need to be completed before the transaction could move forward. (*Id.*) Mr. Musk explained why he said "funding secured" in his August 7 tweet. (*Id.*) Mr. Musk noted that he had "engaged advisors to investigate a range of potential structures and options" to get to a "more precise understanding" on how many shareholders might remain if Tesla became private. (*Id.*) The market did not view this information as revelatory—Tesla's stock price barely moved at all, and in fact *rose* slightly in response to it, increasing from \$355.49 to \$356.41. (Ex. I.)

On August 13, Mr. Musk held a "kick-off call" with Goldman Sachs, Wachtell, and Munger Tolles. (Ex. J.) After the call, Mr. Teller sent an email to multiple individuals from these institutions as well as Mr. Durban, proposing language for Mr. Musk's tweet: "I'm excited to work with Silver Lake and Goldman Sachs as financial advisors, plus Munger, Tolles & Olson and Wachtell, Lipton, Rosen & Katz as legal advisors, on the proposal to take Tesla private." (*Id.*) Later that night, after the close of trading, Mr. Musk posted that statement on his Twitter account. (Ex. K.)

### I. Given Shareholder Feedback, Mr. Musk Decided Tesla Should Remain Public.

After the market closed on August 16, the *New York Times* published an article based on an interview with Mr. Musk. (Ex. 19.) The article made a number of unfounded assertions without providing any supporting evidence, including a statement by the reporter that funding for a take-private "was far from secure." (*Id.*) The next day, Tesla's stock price declined 9%. (Ex. I.). In contrast to the *New York Times* reporter's claim, not only did Mr. Musk firmly believe funding was secured when he tweeted, in reality (per Mr. Musk's discussions with the PIF) it *was* secured.

But Mr. Musk learned through his discussions with existing investors that many wanted Tesla to remain public. (Ex. B at 258:23-259:12.) And for some institutional investors, it would have been much harder for them to maintain stock in a private Tesla than Mr. Musk had anticipated. (*Id.* at 126:1-10.) Mr. Musk also came to learn, contrary to his understanding on August 7, that he may not be able to structure the transaction in a way that allowed all existing retail shareholders to remain. (*Id.* at 132:22-133:3.) In light of these considerations, at the August 23 Board meeting, Mr. Musk announced that he had decided not to move forward with a take-private transaction. (Ex. E at 242:1-10.) Mr. Musk explained his decision to shareholders in a blog post the next day. (Ex. 229.)

### **LEGAL STANDARD**

Summary judgment must be denied unless the moving party can demonstrate that (1) "there is no genuine dispute as to any material fact" and (2) "the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a) (emphasis added). "A fact is material if it might affect the outcome of the case." Jelinek, 747 F. App'x at 514 (emphasis added). When considering a motion for summary judgment, "[t]he evidence of the non-movant is to be believed, and all justifiable inferences are to be drawn in his favor." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 255 (1986). Summary judgment is not appropriate where "a reasonable jury could return a verdict for the nonmoving party." Id. at 248. Courts may deny summary judgment "where there is reason to believe that the better course would be to proceed to a full trial." Id. at 255. This is especially so given that "[c]redibility determinations, the weighing of the evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge." Id.

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### <u>ARGUMENT</u>

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SUMMARY JUDGMENT SHOULD BE DENIED AS TO FALSITY.

Despite ample support in the record showing Mr. Musk's August 7 tweet being true, Plaintiff nonetheless persists in claiming that the following statements were false: (1) "Am considering taking Tesla private at \$420. Funding secured." (2) "Investor support is confirmed." (3) "Only reason why this is not certain is that it's contingent on a shareholder vote." (4) "I have continued to communicate with the Managing Director of the Saudi fund. . . . " (Mot. at 17-23.)

In securities cases, a statement is not false unless it "affirmatively creates an impression of a state of affairs that differs in a material way from the one that actually exists." Reese v. BP Expl. Inc., 643 F.3d 681, 687 (9th Cir. 2011) (citation and alteration omitted). Summary judgment on the element of falsity must be denied if any reasonable jury could conclude that the statement at issue is truthful. S.E.C. v. Platforms Wireless Int'l Corp., 617 F.3d 1072, 1094 (9th Cir. 2010). This is because whether a statement is false "is a mixed question to be decided by the trier of fact." Fecht v. Price Co., 70 F.3d 1078, 1081 (9th Cir. 1995); S.E.C. v. Todd, 642 F.3d 1207, 1220 (9th Cir. 2011). Summary judgment is thus improper where "there are triable questions of fact related to whether statements . . . were misleading." In re JDS Uniphase Corp. Sec. Litig., 2007 WL 2429593, at \*20 (N.D. Cal. Aug. 24, 2007) (denying summary judgment).

Plaintiff has failed to show that there are *no* disputed facts concerning the truth of Mr. Musk's statements concerning a go-private transaction, and has failed to show that no reasonable jury could find in Mr. Musk's favor. Indeed, as the evidence ignored by Plaintiff shows, Mr. Musk's statements concerning a go-private transaction were truthful. Plaintiff's motion therefore must be denied.

### Α. Plaintiff Ignores Material Facts Showing it was Reasonable for Mr. Musk to State "Funding [Was] Secured" and "Investor Support [Was] Confirmed."

Plaintiff argues that Mr. Musk's statements about funding being secured were false because they were based on "one 30-minute conversation [with the PIF] about potentially taking Tesla private." (Mot. at 3.) That is incomplete and false. The full facts demonstrate that, among other things: (1) The PIF approached Mr. Musk in 2016 to discuss investing in Tesla (Statement of Material Facts at 3); (2) Mr. Al-Rumayyan, on behalf of the PIF, met with Mr. Musk throughout 2017 to discuss taking Tesla private (*id.* at 3-4); (3) Mr. Al-Rumayyan and Mr. Musk discussed the potential capital required for such a transaction (*id.*); (4) Mr. Al-Rumayyan met with Mr. Musk on July 31, 2018 and told Mr. Musk that the PIF had just invested billions of dollars in Tesla, the PIF continued to want to take Tesla private and would take whatever steps necessary to achieve that outcome, and Mr. Al-Rumayyan expressed that he had carte blanche authority from the Crown Prince of Saudi Arabia to devote the capital necessary to do so (*id.* at 5-6); (5) Mr. Musk reasonably understood Mr. Al-Rumayyan and the PIF to be committing whatever funding was necessary to complete the go-private transaction (*id.* at 5-12); and (6) Mr. Musk confirmed his understanding that funding was secured in numerous communications with Mr. Al-Rumayyan (*id.* at 11-12).<sup>6</sup>

Plaintiff is "not permitted to cherry pick allegations that entitle them to summary judgment" while ignoring other material facts. *Antonetti v. Skolnik*, 2014 WL 1308626, at \*25 (D. Nev. Mar. 31, 2014). The full factual picture demonstrates a sufficient basis for a jury to conclude that, as the PIF represented to Mr. Musk, "funding [was] secured" and "investor support [was] confirmed." Because there are triable issues of fact, summary judgment must be denied. *See, e.g., S.E.C. v. Phan*, 500 F.3d 895, 907 (9th Cir. 2007) (reversing summary judgment where the district court "refused to credit" defendant's testimony about events at issue); *In re Volkswagen*, 2017 WL 6041723 at \*6 ("the Court DENIES partial summary judgment with respect to the falsity of the 31 investor-report statements" because "a reasonable trier of fact could conclude that Plaintiffs have not met their burden of proving that [the] statements were false"); *In re Sun Microsystems Sec. Litigation*, 1992 WL 226898, at \*6 (N.D. Cal. July 10, 1992) (denying summary judgment and stating that question of falsity was for the jury); *Marucci v. Overland Data, Inc.*, 1999 WL 1027053, at \*1 (S.D. Cal. Aug. 2, 1999) (denying summary judgment where "[m]aterial questions of fact existed concerning whether statements . . . were misleading"); *Garcia v. J2 Glob., Inc.*, 2021 WL 1558331, at \*15 (C.D. Cal. Mar. 5, 2021) (whether statements were misleading "raises questions of fact"); *S.E.C. v. Bankatlantic Bancorp, Inc.*,

Plaintiff also makes a number of strawman arguments in an effort to muddy the waters. For example, Plaintiff asserts that Mr. Musk did not discuss the \$420 stock price with the PIF during their July 31 meeting, that Mr. Musk never obtained a signed commitment from the PIF, and that there had been no discussion about structure or percentage ownership. (Mot. at 6, 19, 21.) But Mr. Musk never made any public representations on any of these issues.

661 F. App'x 629, 637 (11th Cir. 2016) (where a defendant presents evidence demonstrating that a factual dispute exists, "the court has an obligation to allow a jury or judge to resolve the parties' differing versions of the truth *at trial*.") (internal citation omitted, emphasis added).

Not only must the jury decide factually whether "funding [was] secured," the jury must also decide between the parties differing interpretations of what "funding secured" even means in this context. *See, e.g., Washtenaw Cty. Employees' Ret. Sys. v. Walgreen Co.*, 2021 WL 5083756, at \*7 (N.D. Ill. Nov. 2, 2021) (jury must decide disputed meaning of "unusual activity," as well as application of facts to that definition); *Buxbaum v. Deutsche Bank AG*, 196 F. Supp. 2d 367, 373 (S.D.N.Y. 2002) (disagreement "as to the correct translation of 'Übernahmegespräche'" (i.e., whether it meant preliminary merger talks or advanced stage discussions) raised an issue of material fact and therefore "is not a basis for summary judgment."); *In re REMEC Inc. Sec. Litig.*, 702 F. Supp. 2d 1202, 1223 (S.D. Cal. 2010) ("a jury must decide" whether the defendant's statement that its gross profit margin was "consistent" with its business plan was true or false).<sup>7</sup>

The cases cited by Plaintiff, on the other hand, do not support granting summary judgment as to falsity. *Platforms*, 617 F.3d 1072, is the *only case* cited by Plaintiff in which a court granted summary judgment on the issue of falsity. (Mot at 18-19.) In that case, the challenged press release described a product with nine pages of detail, even though *the product did not even exist and the defendants even lacked the funding to build a single prototype*. 617 F.3d at 1082, 94-95. It was thus undisputed that the press release was false, the defendants knew it, and the defendants had no evidence to the contrary. *Id*.

In *Livid Holdings Ltd. v. Salomon Smith Barney, Inc.*, 416 F.3d 940 (9th Cir. 2005) (Mot. at 18), the defendants created an offering memorandum falsely stating that a corporation had *already received* a \$25 million investment. *Id.* at 945. The defendants and the corporation then used that memorandum to solicit additional investors. *Id.* The court held only that the plaintiff's allegations

<sup>&</sup>lt;sup>7</sup> In the motion, Plaintiff references the hearsay opinions of Egon Durban (Silver Lake) and Ryan Brinkman (J.P. Morgan) in an effort to establish a self-serving definition of what the term "secured" means. (Mot. at 17.) First, neither Mr. Durban nor Mr. Brinkman was at the July 31 meeting between Mr. Musk and Mr. Al-Rumayyan, so they have no first-hand knowledge as to the PIF's commitment to take Tesla private. Second, their opinions cannot supplant the role of the jury.

were sufficient to survive *dismissal* (i.e., summary judgment was not at issue). *Id.* at 952. In *S.E.C. v. Sourlis*, 851 F.3d 139 (2d Cir. 2016) (Mot. at 21), the defendant affirmatively represented that she "had spoken to the original note-holders." *Id.* at 145. The defendant's statement was false because "no original note-holders existed and indeed no notes existed." *Id.* (emphasis added).<sup>8</sup>

These cases stand in stark contrast to the facts here, which demonstrate a sufficient basis for Mr. Musk's statements that "funding [was] secured" and "investor support [was] confirmed."

# B. <u>Plaintiff Ignores Material Facts Showing That Mr. Musk's Statement Regarding</u> <a href="mailto:a"a "Shareholder Vote" Was Not Misleading.</a>

On August 7, 2018, Mr. Musk tweeted, "Investor support is confirmed. Only reason why this is not certain is that it's contingent on a shareholder vote." (Ex. 13.) This tweet was truthful, but Plaintiff argues that it was false because "there were also numerous contingencies to the transaction before even getting to a shareholder vote." (Mot. at 22.) However, Mr. Musk publicly disclosed these other "contingencies" and clarified that Tesla was still considering the transaction.

Specifically, Mr. Musk linked a Tesla blog post to his August 7 tweet, which stated clearly that he was "considering taking Tesla private," "a final decision ha[d] not yet been made," and "[t]his proposal to go private would ultimately be finalized through a vote of [Tesla's] shareholders." (Ex. 12 (emphasis added).) Mr. Musk then posted additional details regarding the various actions that would need to be completed, including "a final proposal," "an appropriate evaluation process" by Tesla's special committee, "required regulatory approvals," and ultimately "the plan [to] be presented to Tesla shareholders for a vote." (Ex. 53.9) Additionally, Tesla's stock price closed up from the prior day's

Plaintiff cites two cases in support of his argument that the Court should consider the opinions of analysts in defining "funding secured." (Mot. at 19.) However, in *No. 84 Emp.-Teamster Joint Council Pension Tr. Fund v. Am. W. Holding Corp.*, 320 F.3d 920 (9th Cir. 2003), the court did not "rely[] on analyst statements when determining cause of stock price movement," as Plaintiff suggests. (Mot. at 19.) Instead, the court held simply that the plaintiff's arguments were sufficient to withstand *dismissal on the pleadings. Id.* at 933, 936, 946. Plaintiff asserts that in *U.S. v. Ferguson*, 676 F.3d 260 (2d Cir. 2011), the court "plac[ed] 'substantial' weight on 'stock analysts' when evaluating [the allegedly false] statement." (Mot. at 19.) That is false, as the Court was evaluating materiality, not falsity, and the Court said nothing about the weight of the stock analyst evidence. *Id.* at 274.

<sup>&</sup>lt;sup>9</sup> The Court previously acknowledged Mr. Musk's disclosure of this additional information: "Mr. Musk then proceeds to identify significant hurdles that stand in the way of finalizing the transaction—

close (increasing from \$355.49 to \$356.41) after Mr. Musk disclosed these additional "contingencies" concerning the potential go-private transaction (Ex. I), so Plaintiff cannot argue that (1) stockholders were harmed by Mr. Musk's initial tweet, or that (2) stockholders viewed Mr. Musk's additional disclosure of information as material. Plaintiff's motion ignores these facts. 10 "The key question in considering the misleading nature of a statement is whether defendants' representations, taken together and in context, would have misle[d] a reasonable investor, not whether it is susceptible to any interpretation that could generate misleading impressions when read in isolation." In re Skechers USA, Inc. Sec. Litig., 444 F. Supp. 3d 498, 516 (S.D.N.Y. 2020) (emphasis added, citation omitted). Given the numerous factual disputes and the full context, Plaintiff cannot possibly meet this burden.

# C. Plaintiff's New Argument that Discussions with the PIF Had Ended as of August 13, 2018 is Baseless.

On August 13, 2018, Mr. Musk posted on Tesla's blog that, "[f]ollowing the August 7th announcement [i.e., his initial tweet], [he] continued to communicate with the Managing Director of [the PIF]. He has expressed support for proceeding subject to financial and other due diligence and their internal review process for obtaining approvals. He has also asked for additional details on how the company would be taken private, including any required percentages and any regulatory requirements." (Ex. 53.) Everything Mr. Musk wrote is indisputably true. (See Ex. 121 at 8-13 (post August 7 communications between Mr. Musk and Mr. Al-Rumayyan).) Plaintiff argues only that in the blog post, Mr. Musk did not disclose that "he had sought to end all negotiations with the Saudi PIF." (Mot. at 23.) Plaintiff's argument is nothing more than misdirection, and these issues are "for the trier of fact." TSC Indus., Inc. v. Northway, Inc., 426 U.S. 438, 450 (1976); see also Davis,

namely, 'financial and other due diligence' and an 'internal review process' among other conditions." *In re Tesla, Inc. Sec. Litig.*, 477 F. Supp. 3d 903, 925 (N.D. Cal. 2020).

Mr. Musk's testimony that he believed there was "probably [a] roughly 50 percent" chance that the transaction would occur (Mot. at 22) is consistent with his public statements, where he indicated that the transaction was contingent on a shareholder vote, a final proposal, and regulatory compliance. While Musk was confident in his *desire* to take Tesla private and he had the *funding* to do so, these contingencies made the transaction 50% likely in Mr. Musk's mind. (Ex. B at 257:19-260:15.)

<sup>&</sup>lt;sup>11</sup> In his Complaint and addendum thereto (ECF Nos. 184, 224), Plaintiff does not allege that this statement was false or misleading. Accordingly, it is not properly the subject of summary judgment.

2021 WL 4923359 at \*13; Phan, 500 F.3d at 908.

First, Plaintiff misstates the facts, as Mr. Musk and Mr. Al-Rumayyan did not "end all negotiations." (Mot. at 23.) Rather, on August 12, 2018, Mr. Musk texted Mr. Al-Rumayyan and expressed disappointment that the PIF's public statements regarding the go-private transaction were inconsistent with what Mr. Al-Rumayyan had represented to Mr. Musk during their July 31, 2018 inperson meeting. (Ex. 121 at 10.) Mr. Musk texted Mr. Al-Rumayyan that "there will be no further communication unless you fix the public perception of wishy washy support and interest from PIF. That is not what you said to me and my team privately." (Id. at 12 (emphasis added).) In response, Mr. Al-Rumayyan agreed to "work on [a] PIF statement" so that the PIF and Tesla could continue negotiations, not "end all negotiations," as Plaintiff incorrectly suggests. (Id.)

Second, even though Mr. Musk suggested that he might no longer communicate with Mr. Al-Rumayyan unless he rectified the PIF's public statements, that was not material to shareholders. Omitted information is actionable only if it is material. Basic Inc. v. Levinson, 485 U.S. 224, 231–32 (1988) ("to fulfill the materiality requirement there must be a substantial likelihood that the disclosure of the omitted fact would have been viewed by the reasonable investor as having significantly altered the total mix of information made available") (citation and quotation omitted). Mr. Musk's text to Mr. Al-Rumayyan is not material because (1) Mr. Al-Rumayyan agreed to fix the incorrect public perception, and (2) Tesla already had more than enough support to take Tesla private without the PIF, so the PIF's support was not necessary. (Ex. B at 217:4-15; Ex. E at 242:1-243:20.)

Third, the securities laws "prohibit only misleading and untrue statements, not statements that are incomplete." Brody v. Transitional Hosps. Corp., 280 F.3d 997, 1006 (9th Cir. 2002) (emphasis in original). "No matter how detailed and accurate disclosure statements are, there are likely to be additional details that could have been disclosed but were not." Id. The securities laws "do not create an affirmative duty to disclose any and all material information. Disclosure is required... only when necessary 'to make . . . statements made, in the light of the circumstances under which they were made, not misleading." Matrixx Initiatives, Inc. v. Siracusano, 563 U.S. 27, 44 (2011). Here, that Mr. Musk was disappointed with the PIF's public statements and demanded that they rectify them is entirely consistent with his disclosure that he continued to communicate with the PIF.

### II. SUMMARY JUDGMENT SHOULD BE DENIED AS TO SCIENTER.

### A. Scienter is a Question for the Jury.

Countless courts—including this Court—have held that "[g]enerally, scienter should not be resolved by summary judgment" and have denied summary judgment on that basis. *Davis*, 2021 WL 4923359 at \*13 (Chen, J.) (denying summary judgment where "there is a genuine issue of material fact as to whether Defendants made false or misleading statements, with scienter"); *Howard*, 228 F.3d at 1060; *In re Volkswagen*, 2017 WL 6041723 at \*12 ("Court DENIES Plaintiffs' motion for partial summary judgment on the issue of scienter" "because material issues of fact remain"); *Jasper*, 2009 WL 10701938 at \*3 (denying summary judgment and stating, "[a]lthough the SEC may ultimately prove scienter with circumstantial evidence, the conflicting evidence here does not allow for a finding that as a matter of law, Defendant possessed the requisite mental state to establish a securities fraud claim"); *In re Twitter*, 2020 WL 4187915 at \*12 (denying summary judgment where "a genuine dispute exists as to whether Defendants acted with scienter in making the challenged statements").

As this Court noted, summary judgment is typically improper in such cases because "[m]ateriality and scienter are both fact-specific issues which should ordinarily be left to the trier of fact." *Davis*, 2021 WL 4923359 at \*13 (Chen, J.) (citation omitted); *Vucinich v. Paine, Webber, Jackson & Curtis, Inc.*, 739 F.2d 1434, 1436 (9th Cir. 1984) (reversing summary judgment where "the facts before the court were sufficient to raise factual questions as to defendant's state of mind"); *In re Apple Computer Sec. Litig.*, 886 F.2d 1109, 1113 (9th Cir. 1989).

### B. There Is Ample Evidence that Mr. Musk Believed His Statements Were True.

To prevail on his motion, Plaintiff must show—as a matter of law—that Mr. Musk either *intended* to "deceive, manipulate, or defraud" the public, or his behavior was a "reckless" and "extreme departure from the standards of ordinary care" that goes beyond "even inexcusable negligence." *Ernst & Ernst v. Hochfelder*, 425 U.S. 185, 193 (1976); *Howard*, 228 F.3d at 1063.

Mr. Musk has presented numerous facts, including facts proving his state of mind at the time, that demonstrate he had no such intent. Among other things, (1) on August 2, 2018, Mr. Musk emailed Tesla's Board regarding an "offer to take Tesla private at \$420 [per share]" (Ex. 81); (2) on August 3, Mr. Musk attended a board meeting and explained that the PIF was willing to fund the

transaction (Ex. B at 205:11-25, 206:6-23); (3) Mr. Musk then reached out to financial and legal advisors about the transaction (*id.* at 161:13-21, 162:7-11, 167:5-12, 175:8-25); and (4) Mr. Musk had private communications with Mr. Al-Rumayyan wherein Mr. Musk confirmed his intent to take Tesla private as well as his understanding that funding was secured through the PIF (Ex. 121 at 8-13).

These facts demonstrate beyond a shadow of a doubt that Mr. Musk reasonably believed funding was secured, reasonably believed his public disclosures were accurate, and that Mr. Musk had the genuine desire to take Tesla private. Plaintiff may disagree with Mr. Musk's beliefs and conclusions, which only underscores that these issues must go to the jury. *Vucinich*, 739 F.2d at 1436 (reversing summary judgment in action alleging securities fraud and noting that motion can be denied where "the defendant presents affidavits or other evidence establishing a lack of scienter"); *Davis*, 2021 WL 4923359 at \*13 (Chen, J.) (denying summary judgment due to disputed material facts); *In re Volkswagen*, 2017 WL 6041723 at \*12 (N.D. Cal. Dec. 6, 2017); *Jasper*, 2009 WL 10701938 at \*3; *In re Twitter*, 2020 WL 4187915 at \*12; *Washtenaw*, 2021 WL 5083756 at \*7; *Buxbaum*, 196 F. Supp. 2d at 377. To the extent Plaintiff's theory is that Mr. Musk revealed new and negative information to investors regarding the status of funding through the August 13, 2018 blog post (Ex. 16), that further undermines scienter for the August 7 tweets. *See, e.g.*, *McGovney v. Aerohive Networks, Inc.*, 2019 WL 8137143, at \*23 (N.D. Cal. Aug. 7, 2019) (defendant's disclosure of additional information "on the very topics they supposedly concealed undermines an inference of a deliberate omission").

# III. SUMMARY JUDGMENT SHOULD BE DENIED AS TO RELIANCE.

To prevail on his Section 10(b) claims, Plaintiff must prove that he relied upon Defendants' alleged misrepresentations. *See Halliburton Co. v. Erica P. John Fund, Inc.*, 573 U.S. 258, 263

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Plaintiff argues that "[a] defendant cannot defeat a fraud claim merely by asserting that he believed the statements were true." (Mot. at 19.) But Mr. Musk does not simply state that he "believed" his statements were true. Rather, Mr. Musk has put forth *evidence* showing that Mr. Al-Rumayyan represented that funding was secured, as well as contemporaneous evidence that Mr. Musk believed it. *See Gebhart v. S.E.C.*, 595 F.3d 1034, 1042 n.11 (9th Cir. 2010) (rejecting argument that defendants' statements "are so false that defendants must have known they were false and must have intended to mislead the public" where defendants "submitted sworn declarations testifying that they believed in good faith that their statements were true") (quotation omitted). Summary judgment is improper where the parties disagree as to the interpretation of the evidence, as the evidence must be viewed "in the light most favorable to the nonmoving party." *Phan*, 500 F.3d at 901.

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25 26 (2014). Plaintiff has not put forward any evidence of direct reliance. Instead, Plaintiff seeks to invoke the rebuttable fraud-on-the-market presumption. (Mot. at 24.) The fraud-on-the-market presumption is based on the theory that an "investor who buys or sells stock at the price set by the market does so in reliance on the integrity of that price." Halliburton, 573 U.S. at 268. Therefore, if an allegedly material fraudulent misrepresentation impacted the market price of the security, an investor can be presumed to have relied on the purportedly material misrepresentation. *Id.* 

As Plaintiff concedes, to invoke the fraud-on-the-market presumption, a plaintiff must prove by a preponderance of the evidence that "(1) the alleged misrepresentations were publicly known, (2) they were material, (3) the stock traded in an efficient market, and (4) the plaintiff traded the stock between when the misrepresentations were made and when the truth was revealed." (Mot. at 24 (emphasis added).) Even where Plaintiff proves these requirements, a defendant can rebut the presumption through "[a]ny showing that severs the link between the alleged misrepresentation and ... the price received (or paid) by the plaintiff." *Halliburton*, 573 U.S. at 269 (emphasis added).

Here, Plaintiff is not entitled to summary judgment on the element of reliance for at least two independent reasons. First, there is a genuine dispute of material fact regarding at least one of the requirements necessary to invoke the fraud-on-the-market presumption: materiality. Second, even if there were no dispute the presumption could be invoked, there is a genuine dispute of material fact regarding whether Defendants can rebut that presumption by, among other things, demonstrating that when the purported "truth" was revealed, there was no price impact.

### There is a Genuine Dispute of Fact Regarding Materiality. Α.

There is no dispute that Plaintiff must prove materiality to invoke the fraud-on-the-market presumption for purposes of proving reliance. There also does not appear to be any dispute that questions regarding materiality "are peculiarly ones for the trier of fact." Durning, 815 F.2d at 1268 (quotation omitted). Indeed, Plaintiff's own authorities say as much. (See Mot. at 25 (citing McCrary v. Elations Co. LLC, 2014 WL 12561600, at \*12 (C.D. Cal. Dec. 8, 2014) ("Materiality is generally a question for the jury") (internal quotation marks omitted)).) Plaintiff's own expert likewise concedes that "Materiality . . . is a fact question to be answered at trial." (Ex. L at ¶ 47.) Despite this uphill battle, Plaintiff spends all of *two* sentences—citing six paragraphs in an expert report—to support its

claim that there are no genuine disputes of fact regarding whether the purportedly false portion of Mr. Musk's tweet, "funding secured," was material. (Mot. at 24 (citing Hartzmark Class Cert. Report, ECF No. 291-1 at ¶¶ 71.76).)<sup>13</sup> Those cited paragraphs say nothing more than that there was a stock movement following Mr. Musk's allegedly false tweet. But as a matter of law, a stock price movement alone is insufficient to prove materiality. *See, e.g., In re Allied Cap. Corp. Sec. Litig.*, 2003 WL 1964184, at \*6 (S.D.N.Y. Apr. 25, 2003).

Moreover, inferring materiality from stock movements in this case would be particularly inappropriate since there is no dispute that Mr. Musk's tweet also contained the undisputedly true disclosure that Mr. Musk was considering taking Tesla private. The jury is entitled to conclude that Tesla's stock price increase—which is the evidence Plaintiff relies upon to prove materiality to invoke the presumption—was not attributable to the allegedly false portion of Mr. Musk's tweet. This is particularly true where, as noted above, there is a dispute regarding what a reasonable investor would understand Mr. Musk's allegedly false statements to mean. Therefore, the jury will be required to determine what "funding secured" even meant, and that determination will obviously impact the jury's determination of the materiality of the statement (and the allegedly undisclosed information).

Notably, the evidence actually supports the conclusion that—whatever the market believed the statement meant—it was the indisputably true portion of Mr. Musk's tweet that the market deemed material rather than the allegedly false information. For example, on August 13, 2018, Mr. Musk provided further detail regarding the proposed transaction. Plaintiff's expert cites public news articles that claimed that "Musk's definition of 'funding secured' appears to be, to assess it charitably, a stretch." (Ex. L at ¶ 104.) Similarly, a public sell-side analyst from Barclays noted that Mr. Musk's August 13, 2018 blog post "made it clear that the funding was in its very early stages." (Ex. M.) Yet, despite the purported revelation that funding was far different than Plaintiff's theory of what the market understood "funding secured" to mean, Tesla's stock did not decline in a statistically significant manner. (Ex. L at ¶¶ 100-108.) In fact, Plaintiff's own expert determined that Tesla's

Because Plaintiff does not even attempt to produce evidence regarding the purported materiality of any of the other alleged misstatements—another basis to deny summary judgment—Defendants respond solely to the materiality allegations regarding "funding secured."

stock *increased* by .95% after controlling for market and industry factors. (*Id.*)

Thus, the jury is entitled to conclude that the lack of *any decline* following these purported revelations regarding the meaning of "funding secured" proves that the "funding secured" portion of Mr. Musk's tweet was immaterial. *Teamster*, 320 F.3d at 949 ("[T]he static or dynamic nature of a stock price after the disclosure of previously withheld information is strong evidence of how reasonable investors view the significance of the information.") (Tallman, J., dissenting); *Oran v. Stafford*, 226 F.3d 275, 282 (3d Cir. 2000) ("[I]f a company's disclosure of information has no effect on stock prices, 'it follows that the information disclosed . . . was immaterial as a matter of law.") (Alito, J.) (citation omitted). Accordingly, because there is a genuine issue of dispute regarding the materiality of the allegedly false information, there is a genuine issue of dispute regarding whether the fraud-on-the-market presumption can be invoked and whether reliance can be established. *Hsingching Hsu v. Puma Biotechnology, Inc.*, 2018 WL 4945703, at \*4-5 (C.D. Cal. Oct. 5, 2018) (denying summary judgment on reliance through fraud-on-the-market presumption where material disputes regarding materiality).<sup>14</sup>

# B. There is a Genuine Dispute of Fact Regarding Defendants' Ability to Rebut Any Fraud-On-The-Market Presumption.

Even assuming Plaintiff had established all of the necessary requirements to invoke the fraud-

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Plaintiff's authorities are not to the contrary. In the sole case in which a court granted a plaintiff summary judgment on the issue of reliance, In re Celestica Inc. Sec. Litig., 2014 WL 4160216 (S.D.N.Y. Aug. 20, 2014), "Defendants opposed Plaintiffs' motion [solely] on the basis that the Supreme Court's decision in *Halliburton* . . . , might overrule *Basic* and change the law regarding the fraud on the market presumption," which did not occur. *Id.* at \*5 n.3. They did not oppose the motion on the basis that the allegedly false information was immaterial, as Defendants do here. In Kaplan v. Rose, 49 F.3d 1363, 1378 (9th Cir. 1994), abrogated on other grounds by City of Dearborn Heights Act 345 Police & Fire Ret. Sys. v. Align Tech., Inc., 856 F.3d 605 (9th Cir. 2017), the court partially affirmed defendants' motion for summary judgment on the inapplicability of the fraud-onthe-market presumption and overturned in part noting that "claims based on fraud on the market theory are fact-specific and generally for the trier of fact to decide." Similarly, in McCrary, 2014 WL 12561600 at \*12, the court denied plaintiff's request for summary judgment on the issue of reliance precisely because the presumption of reliance under the relevant law in that case, like this one, required proof of materiality, which "is generally a question of fact for the jury." (quotation omitted). Finally, in In re Infineon Techs. AG Sec. Litig., 266 F.R.D. 386 (N.D. Cal. 2009) did not even involve a summary judgment motion on the issue of reliance.

on-the-market presumption—he has not—that would still be insufficient to grant summary judgment on the issue of reliance since the presumption is *rebuttable*. Although Plaintiff claims that "Defendants did not contest any of Dr. Hartzmark's findings or Plaintiff's contention that Tesla's stock traded in an efficient market" (Mot. at 24), Plaintiff overlooks that Defendants can also rebut the presumption if the "market makers' were privy to the truth" about information allegedly concealed, or second, if "news of [the allegedly concealed truth] credibly entered the market and dissipated the effects of the misstatement." *In re Allstate Corp. Sec. Litig.*, 966 F.3d 595, 606 (7th Cir. 2020) (citation omitted). "Under the first option, the defense shows that only true information was impounded in the market price at the time of purchase; the second option does the same by the time of sale." *Id.* Here, there are genuine issues of fact with respect to both defenses.

First, Defendants' expert put forward evidence that the market understood from the beginning that the entire proposal and source of funding was uncertain. (Ex. N at ¶¶ 15-22.) Thus, there is sufficient evidence from which the jury can infer that market understood that funding secured did not mean that there was some sort of signed term sheet or formal agreement regarding funding.

Second, as noted above, following Mr. Musk's August 13 blog post, Tesla's stock did not decline. Thus, the jury is entitled to infer that either the original statement was immaterial to begin with—in which case the presumption does not apply—or that by virtue of, among other things the evidence detailed in the Fischel Report, the market understood the truth regarding the meaning of "funding secured" prior to the August 13 blog post—in which case the presumption is also rebutted. Either way, as the Supreme Court has recognized, these defenses should be heard at trial. *Basic*, 485 U.S. at 249 & n. 29 (proof that information "credibly entered the market and dissipated the effects of the misstatements" "is a matter for trial."). Accordingly, Plaintiff's request for summary judgment with respect to the element of reliance should be denied. 15

Plaintiff's Motion is defective on other grounds as well. First, Plaintiff seeks summary judgment against both Tesla and Mr. Musk, but Plaintiff failed to include any evidence that Tesla had "ultimate authority over [Mr. Musk's] statement [concerning going private], including its content and whether and how to communicate it." *Janus Cap. Grp., Inc. v. First Derivative Traders*, 564 U.S. 135, 142 (2011). On this basis alone Plaintiff's Motion must be denied as to Tesla. Second, while the Motion purports to be against Tesla's board members (as well as Tesla and Mr. Musk), the relief

- 1	III		
1		<u>CONCLUSION</u>	
2	For the foregoing reasons, Defendants respectfully request that the Court deny in its entirety		
3	Plaintiff's Motion for Partial Summary Judgment.		
4			
5	DATED: February 1, 2022	Respectfully submitted,	
6		QUINN EMANUEL URQUHART & SULLIVAN, LLP	
7	,	Dry /a/ Alon Caina	
8		By: /s/ Alex Spiro Alex Spiro (appearing pro hac vice)	
9		Attorneys for Tesla, Inc., Elon Musk, Brad W. Buss, Robyn Denholm, Ira Ehrenpreis, Antonio J. Gracias,	
10		James Murdoch, Kimbal Musk, And Linda Johnson Rice	
11			
12			
13		ATTESTATION	
14	I, Kyle K. Batter, am the ECF user whose ID and password are being used to file the above		
15			
16		•	
17		/s/ Kyle K. Batter	
18		Kyle K. Batter	
19		•	
20			
21			
22			
23			
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25			
26	5		
27 28	sought is limited to the claims again	nst Tesla and Mr. Musk. (Notice of Motion.) The director 's Motion.	
_0			
	II.	26 Case No. 3:18-cv-04865-FMC	

# EXHIBIT T

# EXCERPTS FROM THE DEPOSITION OF ELON MUSK TAKEN NOVEMBER 5, 2021

1	UNITED STATES DISTRICT COURT	Page 1
2	NORTHERN DISTRICT OF CALIFORNIA	
3	SAN FRANCISCO DIVISION	
	IN RE TESLA, INC. SECURITIES) Case No. LITIGATION ) 3:18-cv-04865-EMC	
5	) )	
6	)	
7	)	
8	)	
9		
10	CONFIDENTIAL	
11	ORAL AND VIDEOTAPED DEPOSITION OF	
12	ELON MUSK	
13	NOVEMBER 5, 2021	
14		
15	ORAL AND VIDEOTAPED DEPOSITION OF ELON MUSK,	
16	produced as a witness at the instance of the Plaintiff,	
17	and duly sworn, was taken in the above-styled and	
18	numbered cause on November 5, 2021, from 10:32 a.m. to	
19	8:04 p.m., before Candice Andino, Certified Shorthand	
20	Reporter in and for the State of Texas, reported by	
21	machine shorthand, at Armbrust & Brown, PLLC, 100	
22	Congress Avenue, Suite 1300, Austin, Texas, pursuant to	
23	Notice and in accordance with the Federal Rules of Civil	
24	Procedure.	
25	JOB NO. 202221	

Page 8 1 MR. NEAL: And I'm Stephen Neal of Cooley representing Mr. Musk and the other defendants in this 3 case. 4 MS. JACKMAN: Candace Jackman, in-house counsel with Tesla. (Witness sworn.) 6 THE WITNESS: I do. 7 ELON MUSK, 8 having been first duly sworn, was examined and testified as follows: 10 11 **EXAMINATION** BY MR. PORRITT: Q. Good morning, Mr. Musk. 13 14 A. Good morning. Q. As you just heard, my name is Nicholas Porritt. 15 I'm one of the counsel for the plaintiffs in this 16 17 matter. 18 A. Okay. Q. I'll be taking your deposition today. I know 19 you've been deposed before, but I'll just quickly go 20 over a couple of ground rules just to -- just to make 21 sure we're all on the same page. Excuse me. 22 23 One is we are creating a written record. You can see Candice here is writing down what I say and 24 will write down what you say. So, with that in mind, 25

Page 92 owning a -- you know, if you want to do something 1 significant with respect to investing in Tesla, since we are publicly traded, the best thing to do is to acquire 3 Tesla stock in the public market. 4 And I mentioned, for example, that 5 Tencent -- I'd had a similar conversation with Tencent, 6 and they had bought 5 percent of Tesla. And so they 7 agreed that that would be something that they would do. 8 9 And, basically, there was a -- a verbal agreement that 10 they would -- they would invest 5 percent of Tesla with no discussion of price and no written agreement. 11 12 And it is also, therefore, consistent in 13 the July 31st meeting that when they said that they 14 would financially support Tesla going private, again, 15 with no discussion of price and only a verbal agreement, 16 it was entirely consistent with their prior behavior 17 that, since they had said they would invest 5 percent, 18 they did invest 5 percent. There was no discussion of 19 price. There was no written agreement. But one could 20 rely upon their statements at the July 31st meeting that they would commit to taking Tesla private, again, with 21 22 no discussion of price and no written agreement. 23 I suspect that's what you're getting 24 towards. 25 Well, we'll get to where I'm getting towards in Q.

Page 99

- 1 A. I don't recall the exact number of
- 2 representatives, but there was Yasir, and there were at
- 3 least a few others.
- 4 Q. Okay. And it was you and Sam Teller at the
- 5 beginning and then Deepak Ahuja joined midway through?
- 6 A. Yes.
- 7 Q. Okay. And the meeting lasted approximately
- 8 30 minutes; is that correct?
- 9 A. I'm not sure of the exact time, but -- but it
- 10 may have been longer than 30 minutes, but 30 minutes to
- 11 an hour.
- 12 Q. Okay. So less than an hour, maybe more than
- 13 30 minutes?
- 14 A. Something like that.
- 15 Q. Okay. In the meeting, you -- you talked about
- 16 current Tesla performance?
- 17 A. At the meeting, we talked about primarily
- 18 the -- the idea of taking Tesla private. That was the
- 19 primary subject of discussion continuing on prior
- 20 discussions to that effect. They informed me that they
- 21 had followed through with taking a 5 percent stake in
- 22 Tesla, and I was, like, Well, this is great.
- So based on a verbal discussion and a
- 24 verbal agreement and no discussion of price, they
- 25 went -- they moved forward and took a 5 percent stake in

Case 3:18-cv-04865-EMC Document 485, Filed 09/20/22 Page 283 of 638 Page 100 1 So what that meant was that you could trust Tesla. their word. And so -- and no -- no written agreement was necessary, and no discussion of price was necessary. 3 And that if they said they would do something, that they 4 5 would. 6 So representatives of the PIF told you that 7 they wanted to own a much larger stake in Tesla? Α. They did. 8 9 Okay. And not just 10 percent versus Q. 10 5 percent, but a substantially larger stake? 11 Α. They said they wanted to own a much Yes. 12 larger stake. And I said, Well, then, the best way to 13 do that is to support us in taking Tesla private with a 14 significant investment that would be enough to take 15 Tesla private. 16 And in order to, you know, get past, let's 17 say, a 50 percent -- or to get a majority vote -- you 18 know, I owned about 25 percent of Tesla. If they were 19 to increase their stake to, let's say, 20 percent of 20 Tesla, you'd then add up other people that I was sure would support a take-private transaction. We could 21 easily get above 50 percent and have the majority 22

25 ahead.

So -- sorry. I thought you were finished.

support for taking Tesla private. So this --

TSG Reporting - Worldwide

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Page 101
              So this left me with high confidence that there
1
          Α.
     would be more than sufficient funding and more than
 3
     sufficient majority vote to take Tesla private. And it
 4
     would be quite reasonable to believe what they say with
     respect to an investment in Tesla since they had
 5
     demonstrated with a multibillion-dollar investment in
 6
 7
     Tesla up to 5 percent, that they would be -- you could
     count on them for a much larger investment.
 8
 9
              Is it your testimony here today that you told
          Q.
10
     them that they would -- you would only look for them to
     acquire up to 20 percent of Tesla?
11
12
                   That's simply my internal calculation.
          Α.
              No.
13
     The -- the -- the easy amount for them to acquire would
14
     be up to about 20 percent. Things would get -- the deal
15
     would be slower if they wanted to go above 20 percent,
16
     because it would be subject to a CFIUS review.
17
     Basically a -- a -- a foreign ownership investment in a
     US company would require -- above 20 percent would
18
19
     require government approval, but below 20 percent would
20
     not.
21
                   And so -- so it's like if they were --
22
     therefore -- which -- it's not a big leap for them --
23
     for them to go from 5 percent to at least 20 percent, if
24
     not higher. But 20 percent would be the easiest number
25
     to do, but obviously they could go higher. It would
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Page 102 just take longer to get approved. 1 And so that's why we say what is -- kind of 2 3 what is the minimum necessary to take Tesla private? And that would be on the order of a 20 percent 4 investment from PIF, which, like I said, combined with 5 my 25 percent vote and a small amount of -- of 6 7 additional shareholders, which could easily then push us past 50 percent and get to a majority vote to take the 8 company private left me with high confidence that there 9 10 would be sufficient funding to take Tesla private. 11 Did you mention this 20 percent number to PIF 12 at the meeting on July 31st? 13 Not explicitly, but they were -- they were very clear that they would do whatever -- whatever number it 14 15 took. 16 Was it their expectation, as you understood it, 17 that they would acquire more than 20 percent? 18 It was my expectation that they would Α. No. support whatever it took to take Tesla private, whether 19 20 that was 20 percent or a larger number. 21 Were they looking to acquire more than 0. 20 percent of Tesla, as communicated to you? 22 23 Α. I think they would be -- they would have been 24 interested in more than 20 percent, yes. 25 Okay. Did they say that? Q.

Page 103 They did not say a specific number, but they 1 Α. said they would be -- support whatever level it took to take Tesla private. 3 4 Those are the exact words used by Yasir? 0. 5 Very close to the exact words. Α. 6 0. Okay. 7 In fact, he reiter- -- he reiter- -- he reiterated to Deepak Ahuja that, even if they did not 8 have enough funds themselves to take Tesla private, that 9 10 they would get -- that they -- that the UAE would 11 supplement their funding to take Tesla private. 12 So they were basically making extremely 13 clear that they would provide whatever funding was necessary to take Tesla private. This is why I was 14 15 confident in saying that funding was secured. Now, when did they say that to Mr. Ahuja? 16 Ο. When -- when Deepak gave Yasir a tour of the 17 Α. 18 factory --O. After --19 20 -- after -- after the meeting. Α. 21 All right. So you weren't present for that 0. 22 conversation? 23 No, but this is what Deepak relayed to me. Α. 24 Okay. When did he tell you? Ο. 25 I think he may have told me later that evening. Α.

Page 107 1 (Witness reviews document.) Α. 2 I see that you're -- what you are 3 saying -- what you are trying to do here is take a 4 comment out of context. So, on page 122, if you don't see the prior context, it sounds like I'm assuming that 5 6 they want to take 80 percent of the company. But in the prior question, in context, I make it clear that I would 7 like to retain our current shareholder base, that it 8 9 would be preferable to me. As many shareholders as 10 possible I would like to retain in a take-private. 11 And this would make it easier from their stand- -- from their standpoint, from a capital 12 13 standpoint. So I made it clear in the prior statement that, while they may prefer 80 percent, my preference, 14 15 which they were supportive of, was that they would have something closer to a 20 percent or maybe 30 percent 16 17 stake. And so my question for you is: Was that --18 19 were those percentages, 20 and 30 percent, explicitly discussed by you with the PIF at the meeting on 20 21 July 31st? 22 Α. The PIF and Yasir was clear that they No. 23 would be supportive of a take-private, and they did not 24 state any hard conditions for being supportive of a 25 They were -- they were broadly supportive take-private.

Page 108

- 1 of a take-private however I would like to do it.
- Q. And do you recall Mr. Ahuja telling Yasir that
- 3 you would need more than 50 percent of the shares to
- 4 take a company private?
- 5 A. You would have to have a majority vote, at
- 6 least, to take a company private, and it would be
- 7 preferable to have a supermajority vote.
- 8 MR. PORRITT: I'm sorry. Could you --
- 9 could you just read back that answer.
- 10 (The record was read as
- 11 follows:
- 12 "A. You would have to have a
- majority vote, at least, to
- 14 take a company private, and it
- 15 would be preferable to have a
- 16 supermajority vote.")
- 17 Q. (BY MR. PORRITT) And when you refer to a
- 18 "supermajority vote," what are you referring to?
- 19 A. Something on the order of -- of 70 percent of
- 20 the company, of the shares.
- 21 Q. All right. So you're thinking about --
- 22 A. Or, like, maybe two-thirds instead of
- 23 50 percent, something like that.
- Q. Okay. Or a majority of the shares that aren't
- 25 owned by you and Kimbal Musk?

Page 109 1 Α. Yes. Okay. Which I think comes out about to be the Ο. 3 same level, once you take out --4 Α. Yeah. 5 Ο. So... 6 Was it clear that the PIF were assuming 7 that other investors would not participate in this going-private transaction? 8 9 Α. No. In fact, I was sure that there would be 10 many investors who would support the take-private. I'm going to refer you to 1 -- page 135 of your 11 12 transcript. 13 Α. Yeah. And, particularly, you testified that PIF were 14 15 not under the assumption that the other investors would participate. That's what you told the SEC there. 16 17 The -- the -- the PIF fund was Yeah. 18 supportive of a take-private however it needed to be They were -- they were not attaching strings to 19 done. 20 the take-private. They were unequivocally supportive of a take-private however it -- however I would like it to 21 22 be done. 23 But, as you said, no price was discussed, 0. 24 correct, for the potential go-private?

No price was discussed for the potential

25

Α.

- 1 take-private, just as -- just as no price was discussed
- 2 when I said take a 5 percent stake in Tesla, and they
- 3 did it nonetheless. And there was no contract. There
- 4 was no written agreement. They did it nonetheless. And
- 5 they are well aware that taking a company private
- 6 implies a premium, and that premium would be on the
- 7 order of 20 percent, if not higher.
- 8 Q. What was -- how would they know that that
- 9 was -- that there was a premium for taking private?
- 10 A. Because they are experienced investors, and
- 11 every take-private has a premium.
- 12 Q. Had the Saudi PIF ever done a take-private
- 13 before?
- 14 A. I don't know if they've done a take-private or
- 15 not, but they are experienced investors, and they are
- 16 well aware that you cannot acquire a company or take a
- 17 company private without a premium.
- 18 Q. And that's something they said to you?
- 19 A. That is not something they said to me, but it
- 20 is something that every experienced investor is aware
- 21 of. And they are an experienced investor.
- 22 Q. And no total amount of funding was discussed at
- 23 this July 31st meeting; correct?
- 24 A. No.
- Q. So it could be anything from 60 to \$80 billion,

- 1 A. This is an out-of-context guess at
- 2 aspirationally what their ownership -- they would like
- 3 their ownership to be. It's not meaningful.
- 4 Q. I'm talking about: What actual amount of
- 5 funding was available coming out of this meeting?
- 6 A. The -- they made it clear that they would do
- 7 whatever it took to support a take-private.
- 8 O. What's the dollar amount that was available
- 9 following this meeting?
- 10 A. Well, it would be -- have to be something that
- 11 would at least get 50 percent of the vote, which could
- 12 be done with a -- a fairly -- I mean, simply taking
- 13 their ownership from 5 percent to 20 percent. I -- I
- 14 make that clear in the SEC testimony. And that would be
- 15 sufficient to get a majority vote for the take-private.
- 16 A supermajority vote is desirable but not required.
- 17 Q. But you would then have to -- to take the
- 18 company private, you would then have to tender for the
- 19 other shares, even if you got 51 percent of the
- 20 vote; right? Correct?
- 21 A. No. It would depend on which shareholders wish
- 22 to retain their ownership for going -- going private.
- 23 This could not be determined without asking them ahead
- 24 of time -- without ask -- in order to understand what
- 25 shareholders would remain as shareholders of Tesla as a

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Page 215
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                   And then you conclude that particular point
     was (as read) Although the majority of shareholders I
     spoke to said they would remain with Tesla if we went
 3
 4
     private, the sentiment, in a nutshell, was "please don't
     do this."
 5
 6
                   Do you see that?
 7
          Α.
              Yes.
 8
          0.
              Okay.
 9
              But I think this confirms what my tweet says,
          Α.
10
     that the -- they are supportive but would prefer not to
11
     do it.
12
              All right. So that's how -- that's how you
13
     interpret the "investor support is confirmed"?
14
          Α.
              Yeah.
                    I mean, they -- I mean, I'm -- I'm
15
     basically -- I think I'm being quite consistent here in
16
     saying that -- you know, that they, you know, have -- I
17
     have investor support to go -- to go private, not that
     it couldn't be done, but there is a preference that it
18
     not be done.
19
20
              Okay. And how would you confirm this investor
21
     support by August 7th, 2018?
22
              Well, the Saudi investment fund was -- said
          Α.
     that they would provide -- they would support going --
23
24
     going private.
25
              Right. Had you confirmed it with any other
          Q.
```

Page 216 1 investor? No, but -- I don't -- I don't recall exactly. But just simply between myself and the Saudi investment 3 fund, we could obviously get a majority vote. And so 4 5 that would be investor support. Well, how would the Saudis get -- how would 6 0. 7 the Sau- -- how would you and the Saudis get a majority vote? 8 9 Well, I owned -- I owned 20 to 25 percent of Α. 10 the shares that would vote, and if they had a similar 11 amount and, you know, investors that I was confident 12 would be supportive, we could easily just get to 13 50 percent. This is a simple --14 0. But that's not confirmed, though, is it? 15 No, I think it was confirmed. In fact, I -- I Α. was clear in earlier testimony that I was confident 16 17 about the Saudi investment support. 18 Q. Right. But --19 They would be an investor. 20 Right. That's one investor, but the -- the Ο. 50 percent isn't confirmed, though; correct? 21 22 The 50 percent we could get to with simply my Α. 23 shares and if they went -- if they, let's say for 24 argument's sake, went to 30 percent, which I mentioned, 25 then we would have the majority.

Page 217 1 Right. But you expressly did not want to care 0. for Saudi. You told the board you did not want the Saudi investment fund to go up to 30 percent. 3 4 I said that 20 to 30 percent was most 5 likely preferable. Not that they would have 50 percent, but that, combined, my shares and theirs would get to 6 7 50 percent, and that would give a majority vote. You hadn't mentioned 20 to 30 percent to the 8 9 Saudi prevention invention [sic] fund. I mean, I know 10 we're somewhat going over old ground, but -- sorry it's 11 come up again. 12 Just to confirm, you hadn't confirmed any 13 percents -- specific percentage with the Saudi pension -- Public Investment Fund, had you? 14 15 They were clear that they would provide Α. whatever support was needed to go private. The minimum 16 17 threshold for going private would be a combined vote of 50 percent. That would require them to get to 25 or 18 19 30 percent ownership from 5 percent, which combined with 20 my 20 to 25 percent would get majority vote. 21 What would --0. 22 That's investor support. 23 O. And what --24 A lot of investor support. Α. 25 What would happen if -- as of August 7th, 2018, Q.

- 1 Q. Right. But you expressly did not want to care
- 2 for Saudi. You told the board you did not want the
- 3 Saudi investment fund to go up to 30 percent.
- A. No. I said that 20 to 30 percent was most
- 5 likely preferable. Not that they would have 50 percent,
- 6 but that, combined, my shares and theirs would get to
- 7 50 percent, and that would give a majority vote.
- 8 Q. You hadn't mentioned 20 to 30 percent to the
- 9 Saudi prevention invention [sic] fund. I mean, I know
- 10 we're somewhat going over old ground, but -- sorry it's
- 11 come up again.
- Just to confirm, you hadn't confirmed any
- 13 percents -- specific percentage with the Saudi
- 14 pension -- Public Investment Fund, had you?
- 15 A. They were clear that they would provide
- 16 whatever support was needed to go private. The minimum
- 17 threshold for going private would be a combined vote of
- 18 50 percent. That would require them to get to 25 or
- 19 30 percent ownership from 5 percent, which combined with
- 20 my 20 to 25 percent would get majority vote.
- 21 Q. What would --
- 22 A. That's investor support.
- 23 O. And what --
- A. A lot of investor support.
- 25 Q. What would happen if -- as of August 7th, 2018,

- 1 He's a CEO.
- 2 A. As I mentioned, the -- the Saudis had
- 3 previously followed through on a verbal commitment to
- 4 purchase 5 percent of Tesla stock in the public markets,
- 5 without discussion of price.
- And so I think it would be consistent of me
- 7 to believe that if they expressed a verbal commitment, a
- 8 future verbal commitment to support Tesla in a
- 9 take-private, that one could count on what they said,
- 10 because they had previously done what they said with
- 11 respect to investing. And so I think it would be
- 12 consistent to believe that they would support a
- 13 take-private if they said they would support a
- 14 take-private.
- 15 Q. But my question -- did you ever get -- my
- 16 question wasn't only the PIF.
- Did you ever get a contractual commitment
- 18 from anyone to fund the going-private transaction?
- 19 MR. NEAL: I object again. I object to the
- 20 form of the question, because "contractual" is a legal
- 21 concept.
- MR. PORRITT: Okay.
- 23 MR. NEAL: You can ask him if he had a
- 24 letter. You can ask him if he had a handshake. You can
- 25 ask -- but -- but to ask him to characterize something

- 1 July 31st, my understanding was that the Saudi
- 2 investment fund was unequivocally supportive of taking
- 3 Tesla private. And that's why I said funding's secured.
- 4 I had, in my opinion, very sound basis for doing so.
- 5 (Previously marked Exhibit 16 referred to.)
- 6 Q. (BY MR. PORRITT) Why don't we just have a look
- 7 at what's been previously marked as Exhibit 16.
- 8 A. (Witness reviews document.)
- 9 Yeah, exactly. Yeah, I think this is a
- 10 very accurate statement. Yeah, I mean, this is -- this
- 11 is exactly what happened.
- MR. NEAL: And, just for the record, when
- 13 you say "this," you're referring to Exhibit 16?
- 14 A. Yeah, this -- exactly. This -- Exhibit 16 is
- 15 exactly what happened. When I say why did I -- why I
- 16 responded why did I say funding secured is because that
- 17 was exactly what I thought was the case from the
- 18 July 31st meeting with PIF.
- 19 Q. (BY MR. PORRITT) So referring to that -- in
- 20 Exhibit 16 on the second page, third paragraph down, you
- 21 write (as read) Following the August 7th announcement,
- 22 I've continued to communicate with the managing director
- 23 of the Saudi fund. He has expressed support for
- 24 proceeding subject to financial and other due diligence
- 25 and their internal review process for obtaining

1	UNITED STATES DISTRICT COURT	Page 299
2	NORTHERN DISTRICT OF CALIFORNIA	
3	SAN FRANCISCO DIVISION	
	IN RE TESLA, INC. SECURITIES) Case No. LITIGATION ) 3:18-cv-04865-EMC	
5	)	
6	)	
7	)	
8	)	
9	REPORTER'S CERTIFICATION	
10	ORAL AND VIDEOTAPED DEPOSITION OF	
11	ELON MUSK	
12	NOVEMBER 5, 2021	
13		
14	I, CANDICE ANDINO, Certified Shorthand Reporter in	
15	and for the State of Texas, hereby certify to the	
16	following:	
17	That the witness, ELON MUSK, was duly sworn by the	
18	officer and that the transcript of the oral deposition	
19	is a true record of the testimony given by the witness;	
20	I further certify that pursuant to FRCP Rule	
21	30(f)(1) that the signature of the deponent:	
22	was requested by the deponent or a party	
23	before the completion of the deposition and returned	
24	within 30 days from date of receipt of the transcript.	
25	If returned, the attached Changes and Signature Page	

Page 300 1 contains changes and the reasons therefor; 2 \_\_X\_ was not requested by the deponent or a party before the completion of the deposition. I further certify that I am neither attorney nor 4 5 counsel for, related to, nor employed by any of the parties to the action in which this testimony was taken. 6 7 Further, I am not a relative or employee of any attorney of record in this cause, nor do I have a 8 financial interest in the action. 10 Subscribed and sworn to on this 10th day of 11 November, 2021. 12 13 CANDICE ANDINO, Texas CSR No. 9332, RMR 14 Expiration Date: 8/31/23 TSG Reporting, Inc. Firm Registration No. 615 15 747 Third Avenue, 10th Floor 16 New York, New York 10017 (877) 702-9580 17 18 19 20 21 22 23 24 25

# EXHIBIT U

#### UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF NEW YORK

UNITED STATES SECURITIES AND EXCHANGE COMMISSION,

Plaintiff,

v.

**ELON MUSK,** 

Defendant.

Civil Action No. 1:18-cv-08865-AJN

# <u>DECLARATION OF ELON MUSK IN SUPPORT OF HIS MOTION TO QUASH</u> & TO TERMINATE CONSENT DECREE

- I, Elon R. Musk, declare as follows:
  - 1. I am the Chief Executive Officer of Tesla, Inc. ("Tesla").
- 2. On August 7, 2018, I learned that the Securities and Exchange Commission ("SEC" or "Commission") intended to investigate a Twitter communication I made on the same day.
- 3. My August 7, 2018 tweet was written at a time when I was in fact considering taking Tesla private at \$420 a share, funding was secured, and there was investor support. See Exhibit A at 1 (Defs.' Opp'n. to Pl.'s Mot. for Partial Summ. J., In re Tesla, Inc. Securities Litig., No. 3:18-cv-04865-EMC (N.D. Cal. Feb. 1, 2022)).
- 4. Despite this, the SEC's unrelenting regulatory pressure, combined with the attendant collateral consequence of the SEC's complaint against me, caused a scenario in which I was forced to sign the consent decree in 2018. Tesla was a less mature company and the SEC's action stood to jeopardize the company's financing. Defending against the SEC's action through

protracted litigation was not in the interests of the company and its shareholders. As Tesla's CEO and Chairman at the time, I perceived that the company and its shareholders would be placed at undue risk unless I settled the matter promptly.

- 5. In September 2018, before filing this action, the SEC offered me a no-admit, no-deny monetary settlement with no officer or director bar. Moments before proceeding with this settlement, on September 26, I learned for the first time that the settlement could require *multiple* companies I was affiliated with—Tesla, SpaceX, The Boring Company, and Neuralink—to either seek a publicly accessible waiver letter regarding the SEC's allegations or risk their future ability to raise money through Regulation D offerings.
- 6. Upon receipt of this information, I was adamant that we needed to withdraw from SEC negotiations. I had only wanted to settle to help Tesla, but I did not wish to cause harm to the other companies. It felt wrong to do so.
- 7. On September 27, my counsel informed the SEC that I had withdrawn my consent to move forward with the settlement. The Commission filed their complaint against me in this case the same day.
- 8. The potential harms of the SEC's action to Tesla and its shareholders were immediately apparent. On September 28, I learned from Tesla's Investor Relations team that several of Tesla's largest shareholders could cede their ownership in Tesla—substantially impacting Tesla's financing—if the case was not settled expediently. I entered into the consent decree for the immediate survival of Tesla.
- 9. I never lied to shareholders. I would never lie to shareholders. I entered into the consent decree for the survival of Tesla, for the sake of its shareholders.

Date:	March 7, 2022	Respectfully submitted,
Place:	New York, NY	M W

I declare under penalty of perjury that the foregoing is true and correct.

# Exhibit A

1 2	QUINN EMANUEL URQUHART & SULLIVAN, LLP Alex Spiro (appearing pro hac vice) alexspiro@quinnemanuel.com		
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5	Redwood Shores, California 94065		
	Telephone: (650) 801-5000		
6	Michael T. Lifrak (Bar No. 210846) michaellifrak@quinnemanuel.com		
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8	jeaninezalduendo@quinnemanuel.com		
9	200 1 111 <b>S</b> 100 5, Cultivision 5 0 0 1 / <b>20</b> 10		
10	Telephone: (213) 443-3000		
11	Attorneys for Defendants Tesla, Inc., Elon Musk,		
12	Brad W. Buss, Robyn Denholm, Ira Ehrenpreis, Antonio J. Gracias, James Murdoch, Kimbal Mu	sk,	
13	And Linda Johnson Rice		
14	UNITED STATES	DISTRICT COURT	
15	NORTHERN DISTRI	ICT OF CALIFORNIA	
16			
17	IN RE TESLA, INC. SECURITIES LITIGATION	Case No. 3:18-cv-04865-EMC	
18	LITIGATION	DEFENDANTS' OPPOSITION TO	
19		PLAINTIFF'S MOTION FOR PARTIAL SUMMARY JUDGMENT	
20		SUMMARI JUDGMENI	
21		Date: March 10, 2022 Time: 1:30 p.m.	
22		Location: Courtroom 5, 17th Floor	
23		Judge: Hon. Edward Chen	
		REDACTED FOR PUBLIC FILING	
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DEFENDANTS' OPPOSITION TO PLAINTIFF'S MOTION FOR PARTIAL SUMMARY JUDGMENT

Case No. 3:18-cv-04865-EMC

1		TABLE OF CONTENTS	<b>Page</b>
2			
3	PRELIMINARY STATEMENT		1
4	ISSUES TO I	BE DECIDED	2
5	STATEMEN	T OF MATERIAL FACTS	3
6	A.	The Public Investment Fund Has Long Desired to Take Tesla Private	3
7	B.	The PIF Agreed to Fund a Transaction to Take Tesla Private.	5
8	C.	Mr. Musk Discussed Going Private at \$420 with Tesla's Board	6
9	D.	Mr. Musk Discussed Going Private With His Financial and Legal Advisors	7
10	E.	Mr. Musk Disclosed the Potential Go-Private Transaction Publicly on August 7.	7
11	F.	Mr. Musk Spoke with Investors and Advisors	9
12   13	G.	Mr. Musk Confirmed His Understanding that Funding Was Secured in Numerous Communications with Mr. Al-Rumayyan.	11
14	Н.	Mr. Musk Updated Shareholders With Additional Information on August 13	12
15 16	I.	Given Shareholder Feedback, Mr. Musk Decided Tesla Should Remain Public.	13
17	LEGAL STA	NDARD	13
18	ARGUMENT	Γ	14
19	I. SUMI	MARY JUDGMENT SHOULD BE DENIED AS TO FALSITY	14
20	A.	Plaintiff Ignores Material Facts Showing it was Reasonable for Mr. Musk to State "Funding [Was] Secured" and "Investor Support [Was] Confirmed."	14
21   22	В.	Plaintiff Ignores Material Facts Showing That Mr. Musk's Statement Regarding a "Shareholder Vote" Was Not Misleading	17
23	C.	Plaintiff's New Argument that Discussions with the PIF Had Ended as of August 13, 2018 is Baseless.	18
24	II. SUMI	MARY JUDGMENT SHOULD BE DENIED AS TO SCIENTER	20
25	A.	Scienter is a Question for the Jury.	20
26   27	В.	There Is Ample Evidence that Mr. Musk Believed His Statements Were True.	20
28	III. SUMI	MARY JUDGMENT SHOULD BE DENIED AS TO RELIANCE	21
		-i- Case No. 3:18-cv-04 EFENDANTS' OPPOSITION TO PLAINTIFF'S MOTION FOR PARTIAL SUMMARY JUI	865-EMC OGMENT

## A. There is a Genuine Dispute of Fact Regarding Defendants' Ability to Rebut Any Fraud-On-The-Market Presumption......24 B. Case No. 3:18-cv-04865-EMC

DEFENDANTS' OPPOSITION TO PLAINTIFF'S MOTION FOR PARTIAL SUMMARY JUDGMENT

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#### **TABLE OF AUTHORITIES** 1 2 **Page** Cases 3 *In re Allied Cap. Corp. Sec. Litig.*, 4 5 In re Allstate Corp. Sec. Litig., 6 Anderson v. Liberty Lobby, Inc., 7 Antonetti v. Skolnik, 8 In re Apple Computer Sec. Litig., 9 10 Basic Inc. v. Levinson, 11 Brody v. Transitional Hosps. Corp., 12 Buxbaum v. Deutsche Bank AG, 13 City of Dearborn Heights Act 345 Police & Fire Ret. Sys. v. Align Tech., Inc., 14 15 Davis v. Yelp, Inc., 16 Durning v. First Bos. Corp., 17 Ernst & Ernst v. Hochfelder, 18 Fecht v. Price Co., 19 20 U.S. v. Ferguson, 21 Garcia v. J2 Glob., Inc., 22 Gebhart v. S.E.C., 23 Halliburton Co. v. Erica P. John Fund, Inc., 24 Howard v. Everex Sys., Inc., 25 26 Hsingching Hsu v. Puma Biotechnology, Inc., 27 In re Infineon Techs. AG Sec. Litig., 28 Case No. 3:18-cv-04865-EMC

DEFENDANTS' OPPOSITION TO PLAINTIFF'S MOTION FOR PARTIAL SUMMARY JUDGMENT

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2   3	In re JDS Uniphase Corp. Sec. Litig., 2007 WL 2429593 (N.D. Cal. Aug. 24, 2007)
4	Jelinek v. Am. Nat'l Prop. & Cas. Co., 747 F. App'x 513 (9th Cir. 2018)
5	<i>Kaplan v. Rose</i> , 49 F.3d 1363 (9th Cir. 1994)
6	Livid Holdings Ltd. v. Salomon Smith Barney, Inc., 416 F.3d 940 (9th Cir. 2005)
7 8	Marucci v. Overland Data, Inc., 1999 WL 1027053 (S.D. Cal. Aug. 2, 1999)
9	Matrixx Initiatives, Inc. v. Siracusano, 563 U.S. 27 (2011)
0	McCrary v. Elations Co. LLC, 2014 WL 12561600 (C.D. Cal. Dec. 8, 2014)
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2	No. 84 EmpTeamster Joint Council Pension Tr. Fund v. Am. W. Holding Corp., 320 F.3d 920 (9th Cir. 2003)
3	Oran v. Stafford, 226 F.3d 275 (3d Cir. 2000)
5	Reese v. BP Expl. Inc., 643 F.3d 681 (9th Cir. 2011)
6	In re REMEC Inc. Sec. Litig., 702 F. Supp. 2d 1202 (S.D. Cal. 2010)
[7] [8]	S.E.C. v. Bankatlantic Bancorp, Inc., 661 F. App'x 629 (11th Cir. 2016)
9	S.E.C. v. Jasper,
20	S.E.C. v. Phan, 500 F.3d 895 (9th Cir. 2007)
21	S.E.C. v. Platforms Wireless Int'l Corp., 617 F.3d 1072 (9th Cir. 2010)
22	S.E.C. v. Sourlis, 851 F.3d 139 (2d Cir. 2016)
23   24	S.E.C. v. Todd, 642 F.3d 1207 (9th Cir. 2011)
25	In re Skechers USA, Inc. Sec. Litig., 444 F. Supp. 3d 498 (S.D.N.Y. 2020)
26	In re Sun Microsystems Sec. Litigation, 1992 WL 226898 (N.D. Cal. July 10, 1992)
27   28	In re Tesla, Inc. Sec. Litig., 477 F. Supp. 3d 903 (N.D. Cal. 2020)
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2	In re Twitter, Inc. Sec. Litig., 2020 WL 4187915 (N.D. Cal. Apr. 17, 2020)
3   4	In re Volkswagen, 2017 WL 6041723 (N.D. Cal. Dec. 6, 2017)
5	Vucinich v. Paine, Webber, Jackson & Curtis, Inc.,         739 F.2d 1434 (9th Cir. 1984)
6	Washtenaw Cty. Employees' Ret. Sys. v. Walgreen Co.,
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8	Fed. R. Civ. P. 56(a)
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### MEMORANDUM OF POINTS AND AUTHORITIES

#### PRELIMINARY STATEMENT

Plaintiff has litigated this case for nearly three years, taken numerous depositions, received hundreds of thousands of pages of documents, and now must contend with one basic truth: Elon Musk's August 7, 2018 tweet informing the public that he was considering taking Tesla private was entirely truthful and cannot support the claims that Plaintiff brings—much less a motion for summary judgment. Mr. Musk was considering taking Tesla private at \$420 a share. Funding was secured. There was investor support. These conclusions are supported by extensive contemporaneous evidence, including discussions with Saudi Arabia's sovereign wealth fund (the "PIF") and Tesla's Board, as well as the undisputed fact that there was sufficient funding for a go-private transaction, from the PIF or otherwise. Plaintiff ignores all of this, ignores what Mr. Musk actually said (and when), ignores what Mr. Musk truly believed, and instead creates strawman arguments that overlook large swaths of evidence adduced during discovery. Far from "fraud," Mr. Musk's statements were an effort to be open about a potential go-private transaction and to provide equal information to all Tesla shareholders. Plaintiff has no valid claims, never mind ones that can be decided in his favor on summary judgment. Plaintiff's transparent attempt to avoid a trial on the merits should be rejected, and the Court should deny Plaintiff's motion in its entirety.

To obtain summary judgment, a plaintiff must show that there are *no* disputes as to *any* material facts. A plaintiff cannot cherry pick certain facts and sweep the remaining inconvenient and unhelpful facts under the rug. But that is precisely what Plaintiff does here, disregarding material facts demonstrating, among other things, that:

racts demonstrating, among other timigs, that.

2 3 word about them. "A fact is material if it might affect the outcome of the case." Jelinek v. Am. Nat'l 4 5 6 7 8 9

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Prop. & Cas. Co., 747 F. App'x 513, 514 (9th Cir. 2018) (emphasis added). The material facts detailed herein relate directly to the alleged falsity of Mr. Musk's statements and thus must be evaluated by the jury. Moreover, the facts demonstrate that Mr. Musk believed his statements were true. Countless courts—including this Court—have held that "[g]enerally, scienter should not be resolved by summary judgment" and have denied summary judgment on that basis. Davis v. Yelp, *Inc.*, 2021 WL 4923359, at \*13 (N.D. Cal. Sept. 17, 2021) (Chen, J.). This is because "materiality and scienter are both fact-specific issues which should ordinarily be left to the trier of fact." *Id.* Plaintiff's motion on the element of reliance fares no better. Plaintiff cannot obtain summary

These material facts go to the key elements of Plaintiff's claims, and Plaintiff does not say a

judgment on reliance without first establishing that Mr. Musk's alleged misstatements were material. But materiality is a question for the jury (see, e.g., Durning v. First Bos. Corp., 815 F.2d 1265, 1268 (9th Cir. 1987)), and it is easy to see why. It is not enough to point out that Tesla's stock price moved after Mr. Musk's statements, as Plaintiff does here. That movement could have been caused by Mr. Musk's *other* indisputably true statements (e.g., that he was considering taking Tesla private or that the PIF had heavily invested in Tesla). Indeed, when Mr. Musk disclosed further details concerning the discussions about funding after his initial tweets, Tesla's stock price hardly moved, suggesting that the alleged misstatements were not material. Plaintiff has not even attempted to meet his burden on this necessary element. This too is a question for the jury, not summary adjudication.

Defendants respectfully request that the Court deny Plaintiff's motion in its entirety.

#### **ISSUES TO BE DECIDED**

(1) Numerous courts, including this one, have recognized that scienter is a question for the jury. Plaintiff in this case ignores the abundance of documentary and contemporaneous evidence demonstrating that Mr. Musk was considering taking Tesla private, that a premium of 20% over the

<sup>&</sup>lt;sup>1</sup> Howard v. Everex Sys., Inc., 228 F.3d 1057, 1060 (9th Cir. 2000); In re Volkswagen, 2017 WL 6041723, at \*12 (N.D. Cal. Dec. 6, 2017); S.E.C. v. Jasper, 2009 WL 10701938, at \*3 (N.D. Cal. Dec. 10, 2009); In re Twitter, Inc. Sec. Litig., 2020 WL 4187915, at \*12 (N.D. Cal. Apr. 17, 2020).

share price was reasonable, that funding was secured at the time of the tweet, and that there was investor support for the transaction. Should the Court deny partial summary judgment on falsity and scienter where the evidence creates numerous triable issues of fact?

(2) The rebuttable fraud-on-the-market presumption requires Plaintiff to prove that the alleged misrepresentations were material. Plaintiff argues that Mr. Musk's statement "funding secured" was material because Tesla's stock price changed following the statement, but ignores that Mr. Musk made *other* indisputably true statements that could account for stock price changes (e.g., "am considering taking Tesla private"). Days later, Mr. Musk clarified what "funding secured" meant and Tesla's stock price hardly moved. Should the Court deny partial summary judgment on the element of reliance where Plaintiff has not attempted to prove the materiality of the challenged statements?

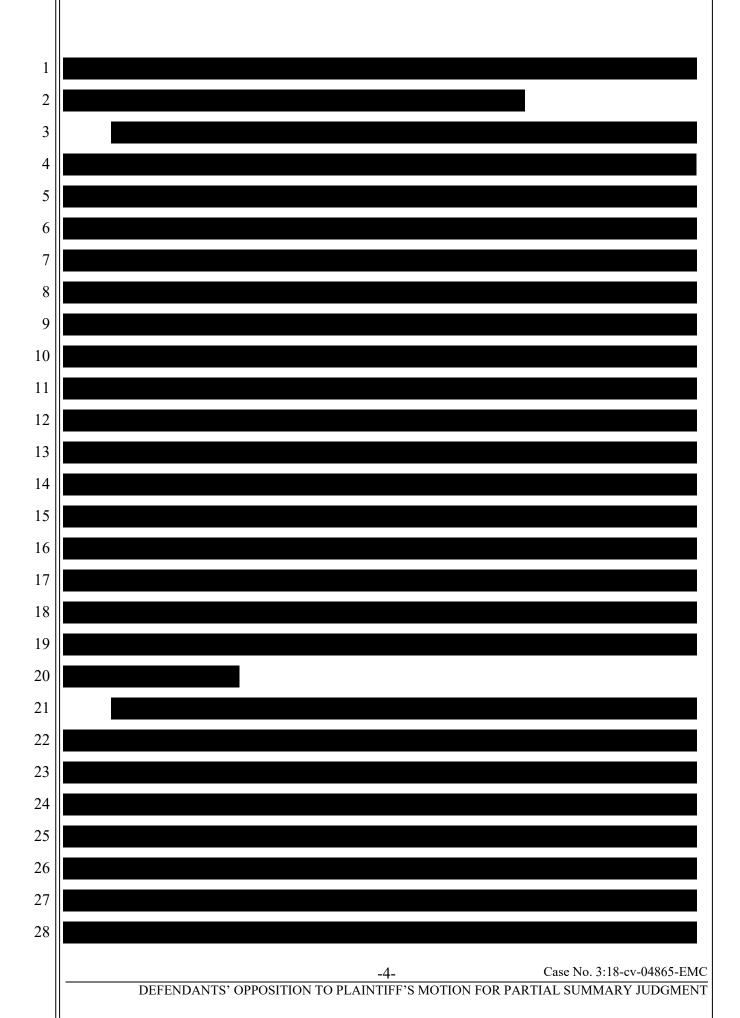
#### STATEMENT OF MATERIAL FACTS

#### A. The Public Investment Fund Has Long Desired to Take Tesla Private.

The PIF is Saudi Arabia's sovereign wealth fund. (Batter Decl., Ex. A.) The PIF's purpose
is to provide financing support for strategic projects on behalf of the Saudi government. (Id.) As of
August 2018, it was reported to have \$225 billion in assets. (Id.) As part of the Saudi government's
efforts to "transform Saudi Arabia from a staid petrostate to a technology-focused economy" (id.),

<sup>&</sup>lt;sup>2</sup> Deposition exhibits are marked with numbers (e.g., 1-400); new exhibits in support of this opposition are marked with letters (e.g., A-Z). All cited exhibits are to the Batter Declaration.

<sup>&</sup>lt;sup>3</sup> Likewise, Mr. Musk believed—and expressed publicly—that Tesla would operate more efficiently as a private company, benefiting its employees and shareholders. (Ex. D.)

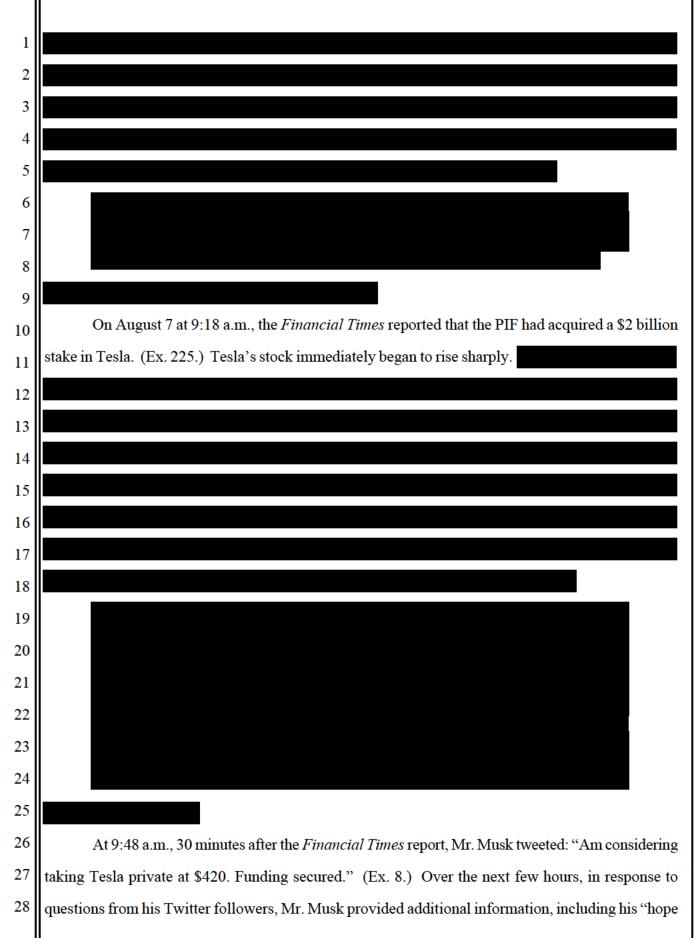


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5	B. The PIF Agreed to Fund a Transaction to Take Tesla Private.
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DEFENDANTS' OPPOSITION TO PLAINTIFF'S MOTION FOR PARTIAL SUMMARY JUDGMENT

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14	D.	Mr. Musk Discussed Going Private With His Financial and Legal Advisors.
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25	E.	Mr. Musk Disclosed the Potential Go-Private Transaction Publicly on August 7.
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1	[that] *all* current investors remain with Tesla even if we're private," and that the rationale for the
2	take-private transaction was that it would be "way smoother & less disruptive as a private company."
3	(Exs. 10, 11.) Some investors interpreted "funding secured" consistently with what had occurred, as
4	"a strong verbal commitment, with funds available and parties willing to execute quickly." (Ex. 33.)
5	Later that day, Mr. Musk emailed Tesla's employees, a copy of which was then posted on
6	Tesla's blog, entitled "Taking Tesla Private." (Ex. 12.) Mr. Musk reiterated, "I'm considering taking
7	Tesla private at a price of \$420/share," and went on to explain his rationale. ( <i>Id.</i> ) He added that, "a
8	final decision has not yet been made," and the proposal "would ultimately be finalized through a vote
9	of our shareholders." (Id.) Mr. Musk linked to this blog post on his Twitter account, including a short
10	cover note: "Investor support is confirmed. Only reason why this is not certain is that it's contingent
11	on shareholder vote." (Ex. 13.)
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19	The next morning, before the market opened,
20	Tesla's Board announced that Mr. Musk had opened a discussion about taking Tesla private, and that
21	the Board was "taking the appropriate next steps to evaluate this." (Ex. 26.)
22	F. Mr. Musk Spoke with Investors and Advisors.
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# Case No. 3:18-cv-04865-EMC -10-

DEFENDANTS' OPPOSITION TO PLAINTIFF'S MOTION FOR PARTIAL SUMMARY JUDGMENT

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1	G.	Mr. Musk Confirmed His Understanding that Funding Was Secured in
2		Numerous Communications with Mr. Al-Rumayyan.
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		11_ Case No. 3:18-cy-04865-FM0

DEFENDANTS' OPPOSITION TO PLAINTIFF'S MOTION FOR PARTIAL SUMMARY JUDGMENT

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12	H. Mr. Musk Updated Shareholders With Additional Information on August 13.
13	Before the markets opened on August 13, Mr. Musk posted an "Update on Taking Tesla
ا 4	Private" on Tesla's blog. (Ex. 16.) The post included additional details regarding, among other
15	things, Mr. Musk's funding discussions with the PIF, the potential structure of the transaction, and the
16	various actions that would need to be completed before the transaction could move forward. (Id.) Mr.
17	Musk explained why he said "funding secured" in his August 7 tweet. (Id.) Mr. Musk noted that he
18	had "engaged advisors to investigate a range of potential structures and options" to get to a "more
19	precise understanding" on how many shareholders might remain if Tesla became private. (Id.) The
20	market did not view this information as revelatory—Tesla's stock price barely moved at all, and in
21	fact <i>rose</i> slightly in response to it, increasing from \$355.49 to \$356.41. (Ex. I.)
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26	Later that night, after the
27	close of trading, Mr. Musk posted that statement on his Twitter account. (Ex. K.)
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#### I. Given Shareholder Feedback, Mr. Musk Decided Tesla Should Remain Public.

After the market closed on August 16, the *New York Times* published an article based on an interview with Mr. Musk. (Ex. 19.) The article made a number of unfounded assertions without providing any supporting evidence, including a statement by the reporter that funding for a take-private "was far from secure." (*Id.*) The next day, Tesla's stock price declined 9%. (Ex. I.). In contrast to the *New York Times* reporter's claim, not only did Mr. Musk firmly believe funding was secured when he tweeted, in reality (per Mr. Musk's discussions with the PIF) it *was* secured.

Mr. Musk explained his decision to shareholders in a blog post the next day. (Ex. 229.)

#### **LEGAL STANDARD**

Summary judgment must be denied unless the moving party can demonstrate that (1) "there is no genuine dispute as to any material fact" and (2) "the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a) (emphasis added). "A fact is material if it might affect the outcome of the case." Jelinek, 747 F. App'x at 514 (emphasis added). When considering a motion for summary judgment, "[t]he evidence of the non-movant is to be believed, and all justifiable inferences are to be drawn in his favor." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 255 (1986). Summary judgment is not appropriate where "a reasonable jury could return a verdict for the nonmoving party." Id. at 248. Courts may deny summary judgment "where there is reason to believe that the better course would be to proceed to a full trial." Id. at 255. This is especially so given that "[c]redibility determinations, the weighing of the evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge." Id.

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#### <u>ARGUMENT</u>

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#### SUMMARY JUDGMENT SHOULD BE DENIED AS TO FALSITY.

Despite ample support in the record showing Mr. Musk's August 7 tweet being true, Plaintiff nonetheless persists in claiming that the following statements were false: (1) "Am considering taking Tesla private at \$420. Funding secured." (2) "Investor support is confirmed." (3) "Only reason why this is not certain is that it's contingent on a shareholder vote." (4) "I have continued to communicate with the Managing Director of the Saudi fund. . . . " (Mot. at 17-23.)

In securities cases, a statement is not false unless it "affirmatively creates an impression of a state of affairs that differs in a material way from the one that actually exists." Reese v. BP Expl. Inc., 643 F.3d 681, 687 (9th Cir. 2011) (citation and alteration omitted). Summary judgment on the element of falsity must be denied if any reasonable jury could conclude that the statement at issue is truthful. S.E.C. v. Platforms Wireless Int'l Corp., 617 F.3d 1072, 1094 (9th Cir. 2010). This is because whether a statement is false "is a mixed question to be decided by the trier of fact." Fecht v. Price Co., 70 F.3d 1078, 1081 (9th Cir. 1995); S.E.C. v. Todd, 642 F.3d 1207, 1220 (9th Cir. 2011). Summary judgment is thus improper where "there are triable questions of fact related to whether statements . . . were misleading." In re JDS Uniphase Corp. Sec. Litig., 2007 WL 2429593, at \*20 (N.D. Cal. Aug. 24, 2007) (denying summary judgment).

Plaintiff has failed to show that there are *no* disputed facts concerning the truth of Mr. Musk's statements concerning a go-private transaction, and has failed to show that no reasonable jury could find in Mr. Musk's favor. Indeed, as the evidence ignored by Plaintiff shows, Mr. Musk's statements concerning a go-private transaction were truthful. Plaintiff's motion therefore must be denied.

#### Α. Plaintiff Ignores Material Facts Showing it was Reasonable for Mr. Musk to State "Funding [Was] Secured" and "Investor Support [Was] Confirmed."

Plaintiff argues that Mr. Musk's statements about funding being secured were false because they were based on "one 30-minute conversation [with the PIF] about potentially taking Tesla private." (Mot. at 3.) That is incomplete and false.

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Plaintiff is "not permitted to cherry pick allegations that entitle them to summary judgment" while ignoring other material facts. *Antonetti v. Skolnik*, 2014 WL 1308626, at \*25 (D. Nev. Mar. 31, 2014). The full factual picture demonstrates a sufficient basis for a jury to conclude that, as the PIF represented to Mr. Musk, "funding [was] secured" and "investor support [was] confirmed." Because there are triable issues of fact, summary judgment must be denied. *See, e.g.*, *S.E.C. v. Phan*, 500 F.3d 895, 907 (9th Cir. 2007) (reversing summary judgment where the district court "refused to credit" defendant's testimony about events at issue); *In re Volkswagen*, 2017 WL 6041723 at \*6 ("the Court DENIES partial summary judgment with respect to the falsity of the 31 investor-report statements" because "a reasonable trier of fact could conclude that Plaintiffs have not met their burden of proving that [the] statements were false"); *In re Sun Microsystems Sec. Litigation*, 1992 WL 226898, at \*6 (N.D. Cal. July 10, 1992) (denying summary judgment and stating that question of falsity was for the jury); *Marucci v. Overland Data, Inc.*, 1999 WL 1027053, at \*1 (S.D. Cal. Aug. 2, 1999) (denying summary judgment where "[m]aterial questions of fact existed concerning whether statements . . . were misleading"); *Garcia v. J2 Glob., Inc.*, 2021 WL 1558331, at \*15 (C.D. Cal. Mar. 5, 2021) (whether statements were misleading "raises questions of fact"); *S.E.C. v. Bankatlantic Bancorp, Inc.*,

<sup>&</sup>lt;sup>6</sup> Plaintiff also makes a number of strawman arguments in an effort to muddy the waters. For example, Plaintiff asserts that Mr. Musk did not discuss the \$420 stock price with the PIF during their July 31 meeting, that Mr. Musk never obtained a signed commitment from the PIF, and that there had been no discussion about structure or percentage ownership. (Mot. at 6, 19, 21.) But Mr. Musk never made any public representations on any of these issues.

661 F. App'x 629, 637 (11th Cir. 2016) (where a defendant presents evidence demonstrating that a factual dispute exists, "the court has an obligation to allow a jury or judge to resolve the parties' differing versions of the truth *at trial*.") (internal citation omitted, emphasis added).

Not only must the jury decide factually whether "funding [was] secured," the jury must also decide between the parties differing interpretations of what "funding secured" even means in this context. *See, e.g., Washtenaw Cty. Employees' Ret. Sys. v. Walgreen Co.*, 2021 WL 5083756, at \*7 (N.D. Ill. Nov. 2, 2021) (jury must decide disputed meaning of "unusual activity," as well as application of facts to that definition); *Buxbaum v. Deutsche Bank AG*, 196 F. Supp. 2d 367, 373 (S.D.N.Y. 2002) (disagreement "as to the correct translation of 'Übernahmegespräche'" (i.e., whether it meant preliminary merger talks or advanced stage discussions) raised an issue of material fact and therefore "is not a basis for summary judgment."); *In re REMEC Inc. Sec. Litig.*, 702 F. Supp. 2d 1202, 1223 (S.D. Cal. 2010) ("a jury must decide" whether the defendant's statement that its gross profit margin was "consistent" with its business plan was true or false).<sup>7</sup>

The cases cited by Plaintiff, on the other hand, do not support granting summary judgment as to falsity. *Platforms*, 617 F.3d 1072, is the *only case* cited by Plaintiff in which a court granted summary judgment on the issue of falsity. (Mot at 18-19.) In that case, the challenged press release described a product with nine pages of detail, even though *the product did not even exist and the defendants even lacked the funding to build a single prototype*. 617 F.3d at 1082, 94-95. It was thus undisputed that the press release was false, the defendants knew it, and the defendants had no evidence to the contrary. *Id*.

In *Livid Holdings Ltd. v. Salomon Smith Barney, Inc.*, 416 F.3d 940 (9th Cir. 2005) (Mot. at 18), the defendants created an offering memorandum falsely stating that a corporation had *already received* a \$25 million investment. *Id.* at 945. The defendants and the corporation then used that memorandum to solicit additional investors. *Id.* The court held only that the plaintiff's allegations

<sup>&</sup>lt;sup>7</sup> In the motion, Plaintiff references the hearsay opinions of Egon Durban (Silver Lake) and Ryan Brinkman (J.P. Morgan) in an effort to establish a self-serving definition of what the term "secured" means. (Mot. at 17.) First, neither Mr. Durban nor Mr. Brinkman was at the July 31 meeting between Mr. Musk and Mr. Al-Rumayyan, so they have no first-hand knowledge as to the PIF's commitment to take Tesla private. Second, their opinions cannot supplant the role of the jury.

were sufficient to survive *dismissal* (i.e., summary judgment was not at issue). *Id.* at 952. In *S.E.C. v. Sourlis*, 851 F.3d 139 (2d Cir. 2016) (Mot. at 21), the defendant affirmatively represented that she "had spoken to the original note-holders." *Id.* at 145. The defendant's statement was false because "no original note-holders existed and indeed no notes existed." *Id.* (emphasis added).<sup>8</sup>

These cases stand in stark contrast to the facts here, which demonstrate a sufficient basis for Mr. Musk's statements that "funding [was] secured" and "investor support [was] confirmed."

### B. <u>Plaintiff Ignores Material Facts Showing That Mr. Musk's Statement Regarding</u> <a href="mailto:a" a "Shareholder Vote" Was Not Misleading.</a>

On August 7, 2018, Mr. Musk tweeted, "Investor support is confirmed. Only reason why this is not certain is that it's contingent on a shareholder vote." (Ex. 13.) This tweet was truthful, but Plaintiff argues that it was false because "there were also numerous contingencies to the transaction before even getting to a shareholder vote." (Mot. at 22.) However, Mr. Musk publicly disclosed these other "contingencies" and clarified that Tesla was still considering the transaction.

Specifically, Mr. Musk linked a Tesla blog post to his August 7 tweet, which stated clearly that he was "considering taking Tesla private," "a final decision ha[d] not yet been made," and "[t]his proposal to go private would ultimately be finalized through a vote of [Tesla's] shareholders." (Ex. 12 (emphasis added).) Mr. Musk then posted additional details regarding the various actions that would need to be completed, including "a final proposal," "an appropriate evaluation process" by Tesla's special committee, "required regulatory approvals," and ultimately "the plan [to] be presented to Tesla shareholders for a vote." (Ex. 53.9) Additionally, Tesla's stock price closed *up* from the prior day's

Plaintiff cites two cases in support of his argument that the Court should consider the opinions of analysts in defining "funding secured." (Mot. at 19.) However, in *No. 84 Emp.-Teamster Joint Council Pension Tr. Fund v. Am. W. Holding Corp.*, 320 F.3d 920 (9th Cir. 2003), the court did not "rely[] on analyst statements when determining cause of stock price movement," as Plaintiff suggests. (Mot. at 19.) Instead, the court held simply that the plaintiff's arguments were sufficient to withstand *dismissal on the pleadings. Id.* at 933, 936, 946. Plaintiff asserts that in *U.S. v. Ferguson*, 676 F.3d 260 (2d Cir. 2011), the court "plac[ed] 'substantial' weight on 'stock analysts' when evaluating [the allegedly false] statement." (Mot. at 19.) That is false, as the Court was evaluating materiality, not falsity, and the Court said nothing about the weight of the stock analyst evidence. *Id.* at 274.

<sup>&</sup>lt;sup>9</sup> The Court previously acknowledged Mr. Musk's disclosure of this additional information: "Mr. Musk then proceeds to identify significant hurdles that stand in the way of finalizing the transaction—

close (increasing from \$355.49 to \$356.41) after Mr. Musk disclosed these additional "contingencies" concerning the potential go-private transaction (Ex. I), so Plaintiff cannot argue that (1) stockholders were harmed by Mr. Musk's initial tweet, or that (2) stockholders viewed Mr. Musk's additional disclosure of information as material. Plaintiff's motion ignores these facts. 10 "The key question in considering the misleading nature of a statement is whether defendants' representations, taken together and in context, would have misle[d] a reasonable investor, not whether it is susceptible to any interpretation that could generate misleading impressions when read in isolation." In re Skechers USA, Inc. Sec. Litig., 444 F. Supp. 3d 498, 516 (S.D.N.Y. 2020) (emphasis added, citation omitted). Given the numerous factual disputes and the full context, Plaintiff cannot possibly meet this burden. 

## C. Plaintiff's New Argument that Discussions with the PIF Had Ended as of August 13, 2018 is Baseless.

On August 13, 2018, Mr. Musk posted on Tesla's blog that, "[f]ollowing the August 7th announcement [i.e., his initial tweet], [he] continued to communicate with the Managing Director of [the PIF]. He has expressed support for proceeding subject to financial and other due diligence and their internal review process for obtaining approvals. He has also asked for additional details on how the company would be taken private, including any required percentages and any regulatory requirements." (Ex. 53.) Everything Mr. Musk wrote is indisputably true. (See Ex. 121 at 8-13 (post August 7 communications between Mr. Musk and Mr. Al-Rumayyan).) Plaintiff argues only that in the blog post, Mr. Musk did not disclose that "he had sought to end all negotiations with the Saudi PIF." (Mot. at 23.) Plaintiff's argument is nothing more than misdirection, and these issues are "for the trier of fact." TSC Indus., Inc. v. Northway, Inc., 426 U.S. 438, 450 (1976); see also Davis,

namely, 'financial and other due diligence' and an 'internal review process' among other conditions." *In re Tesla, Inc. Sec. Litig.*, 477 F. Supp. 3d 903, 925 (N.D. Cal. 2020).

<sup>10</sup> Mr. Musk's testimony that he believed

(Mot. at 22) is consistent with his public statements, where he indicated that the transaction was contingent on a shareholder vote, a final proposal, and regulatory compliance. While Musk was confident in his *desire* to take Tesla private and he had the *funding* to do so,

<sup>&</sup>lt;sup>11</sup> In his Complaint and addendum thereto (ECF Nos. 184, 224), Plaintiff does not allege that this statement was false or misleading. Accordingly, it is not properly the subject of summary judgment.

1	2021 WL 4923359 at *13; <i>Phan</i> , 500 F.3d at 908.
2	First, Plaintiff misstates the facts, as Mr. Musk and Mr. Al-Rumayyan did not "end all
3	negotiations." (Mot. at 23.)
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12	that was not material to shareholders.
13	Omitted information is actionable only if it is material. <i>Basic Inc. v. Levinson</i> , 485 U.S. 224, 231–32
14	(1988) ("to fulfill the materiality requirement there must be a substantial likelihood that the disclosure
15	of the omitted fact would have been viewed by the reasonable investor as having significantly altered
16	the total mix of information made available") (citation and quotation omitted).
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20	Third, the securities laws "prohibit only misleading and untrue statements, not statements that
21	are incomplete." Brody v. Transitional Hosps. Corp., 280 F.3d 997, 1006 (9th Cir. 2002) (emphasis in
22	original). "No matter how detailed and accurate disclosure statements are, there are likely to be
23	additional details that could have been disclosed but were not." Id. The securities laws "do not create
24	an affirmative duty to disclose any and all material information. Disclosure is required only when
25	necessary 'to make statements made, in the light of the circumstances under which they were
26	made, not misleading." Matrixx Initiatives, Inc. v. Siracusano, 563 U.S. 27, 44 (2011).
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#### II. SUMMARY JUDGMENT SHOULD BE DENIED AS TO SCIENTER.

#### A. Scienter is a Question for the Jury.

Countless courts—including this Court—have held that "[g]enerally, scienter should not be resolved by summary judgment" and have denied summary judgment on that basis. *Davis*, 2021 WL 4923359 at \*13 (Chen, J.) (denying summary judgment where "there is a genuine issue of material fact as to whether Defendants made false or misleading statements, with scienter"); *Howard*, 228 F.3d at 1060; *In re Volkswagen*, 2017 WL 6041723 at \*12 ("Court DENIES Plaintiffs' motion for partial summary judgment on the issue of scienter" "because material issues of fact remain"); *Jasper*, 2009 WL 10701938 at \*3 (denying summary judgment and stating, "[a]lthough the SEC may ultimately prove scienter with circumstantial evidence, the conflicting evidence here does not allow for a finding that as a matter of law, Defendant possessed the requisite mental state to establish a securities fraud claim"); *In re Twitter*, 2020 WL 4187915 at \*12 (denying summary judgment where "a genuine dispute exists as to whether Defendants acted with scienter in making the challenged statements").

As this Court noted, summary judgment is typically improper in such cases because "[m]ateriality and scienter are both fact-specific issues which should ordinarily be left to the trier of fact." *Davis*, 2021 WL 4923359 at \*13 (Chen, J.) (citation omitted); *Vucinich v. Paine, Webber, Jackson & Curtis, Inc.*, 739 F.2d 1434, 1436 (9th Cir. 1984) (reversing summary judgment where "the facts before the court were sufficient to raise factual questions as to defendant's state of mind"); *In re Apple Computer Sec. Litig.*, 886 F.2d 1109, 1113 (9th Cir. 1989).

#### B. There Is Ample Evidence that Mr. Musk Believed His Statements Were True.

To prevail on his motion, Plaintiff must show—as a matter of law—that Mr. Musk either *intended* to "deceive, manipulate, or defraud" the public, or his behavior was a "reckless" and "extreme departure from the standards of ordinary care" that goes beyond "even inexcusable negligence." *Ernst & Ernst v. Hochfelder*, 425 U.S. 185, 193 (1976); *Howard*, 228 F.3d at 1063.

Mr. Musk has presented nume	rous facts, including	facts proving his state	e of mind at the time
that demonstrate he had no such into	ent.		

These facts demonstrate beyond a shadow of a doubt that Mr. Musk reasonably believed funding was secured, reasonably believed his public disclosures were accurate, and that Mr. Musk had the genuine desire to take Tesla private. Plaintiff may disagree with Mr. Musk's beliefs and conclusions, which only underscores that these issues must go to the jury. *Vucinich*, 739 F.2d at 1436 (reversing summary judgment in action alleging securities fraud and noting that motion can be denied where "the defendant presents affidavits or other evidence establishing a lack of scienter"); *Davis*, 2021 WL 4923359 at \*13 (Chen, J.) (denying summary judgment due to disputed material facts); *In re Volkswagen*, 2017 WL 6041723 at \*12 (N.D. Cal. Dec. 6, 2017); *Jasper*, 2009 WL 10701938 at \*3; *In re Twitter*, 2020 WL 4187915 at \*12; *Washtenaw*, 2021 WL 5083756 at \*7; *Buxbaum*, 196 F. Supp. 2d at 377. To the extent Plaintiff's theory is that Mr. Musk revealed new and negative information to investors regarding the status of funding through the August 13, 2018 blog post (Ex. 16), that further undermines scienter for the August 7 tweets. *See, e.g., McGovney v. Aerohive Networks, Inc.*, 2019 WL 8137143, at \*23 (N.D. Cal. Aug. 7, 2019) (defendant's disclosure of additional information "on the very topics they supposedly concealed undermines an inference of a deliberate omission").

#### III. SUMMARY JUDGMENT SHOULD BE DENIED AS TO RELIANCE.

To prevail on his Section 10(b) claims, Plaintiff must prove that he relied upon Defendants' alleged misrepresentations. *See Halliburton Co. v. Erica P. John Fund, Inc.*, 573 U.S. 258, 263

Plaintiff argues that "[a] defendant cannot defeat a fraud claim merely by asserting that he believed the statements were true." (Mot. at 19.) But Mr. Musk does not simply state that he "believed" his statements were true. Rather, Mr. Musk has put forth *evidence* showing that Mr. Al-Rumayyan represented that funding was secured, as well as contemporaneous evidence that Mr. Musk believed it. *See Gebhart v. S.E.C.*, 595 F.3d 1034, 1042 n.11 (9th Cir. 2010) (rejecting argument that defendants' statements "are so false that defendants must have known they were false and must have intended to mislead the public" where defendants "submitted sworn declarations testifying that they believed in good faith that their statements were true") (quotation omitted). Summary judgment is improper where the parties disagree as to the interpretation of the evidence, as the evidence must be viewed "in the light most favorable to the nonmoving party." *Phan*, 500 F.3d at 901.

(2014). Plaintiff has not put forward any evidence of direct reliance. Instead, Plaintiff seeks to invoke the *rebuttable* fraud-on-the-market presumption. (Mot. at 24.) The fraud-on-the-market presumption is based on the theory that an "investor who buys or sells stock at the price set by the market does so in reliance on the integrity of that price." *Halliburton*, 573 U.S. at 268. Therefore, if an allegedly material fraudulent misrepresentation impacted the market price of the security, an investor can be presumed to have relied on the purportedly material misrepresentation. *Id*.

As Plaintiff concedes, to invoke the fraud-on-the-market presumption, a plaintiff must prove by a preponderance of the evidence that "(1) the alleged misrepresentations were publicly known, (2) *they were material*, (3) the stock traded in an efficient market, and (4) the plaintiff traded the stock between when the misrepresentations were made and when the truth was revealed." (Mot. at 24 (emphasis added).) Even where Plaintiff proves these requirements, a defendant can rebut the presumption through "*[a]ny showing* that severs the link between the alleged misrepresentation and . . . . the price received (or paid) by the plaintiff." *Halliburton*, 573 U.S. at 269 (emphasis added).

Here, Plaintiff is not entitled to summary judgment on the element of reliance for at least two independent reasons. *First*, there is a genuine dispute of material fact regarding at least one of the requirements necessary to invoke the fraud-on-the-market presumption: materiality. *Second*, even if there were no dispute the presumption could be invoked, there is a genuine dispute of material fact regarding whether Defendants can rebut that presumption by, among other things, demonstrating that when the purported "truth" was revealed, there was no price impact.

#### A. There is a Genuine Dispute of Fact Regarding Materiality.

There is no dispute that Plaintiff must prove materiality to invoke the fraud-on-the-market presumption for purposes of proving reliance. There also does not appear to be any dispute that questions regarding materiality "are peculiarly ones for the trier of fact." *Durning*, 815 F.2d at 1268 (quotation omitted). Indeed, Plaintiff's own authorities say as much. (*See* Mot. at 25 (citing *McCrary v. Elations Co. LLC*, 2014 WL 12561600, at \*12 (C.D. Cal. Dec. 8, 2014) ("Materiality is generally a question for the jury") (internal quotation marks omitted)).)

Despite this uphill

battle, Plaintiff spends all of two sentences—citing six paragraphs in an expert report—to support its

claim that there are no genuine disputes of fact regarding whether the purportedly false portion of Mr. Musk's tweet, "funding secured," was material. (Mot. at 24 (citing Hartzmark Class Cert. Report, ECF No. 291-1 at ¶¶ 71.76).)<sup>13</sup> Those cited paragraphs say nothing more than that there was a stock movement following Mr. Musk's allegedly false tweet. But as a matter of law, a stock price movement alone is insufficient to prove materiality. *See, e.g., In re Allied Cap. Corp. Sec. Litig.*, 2003 WL 1964184, at \*6 (S.D.N.Y. Apr. 25, 2003).

Moreover, inferring materiality from stock movements in this case would be particularly inappropriate since there is no dispute that Mr. Musk's tweet also contained the undisputedly true disclosure that Mr. Musk was considering taking Tesla private. The jury is entitled to conclude that Tesla's stock price increase—which is the evidence Plaintiff relies upon to prove materiality to invoke the presumption—was not attributable to the allegedly false portion of Mr. Musk's tweet. This is particularly true where, as noted above, there is a dispute regarding what a reasonable investor would understand Mr. Musk's allegedly false statements to mean. Therefore, the jury will be required to determine what "funding secured" even meant, and that determination will obviously impact the jury's determination of the materiality of the statement (and the allegedly undisclosed information).

Notably, the evidence actually supports the conclusion that—whatever the market believed the statement meant—it was the indisputably true portion of Mr. Musk's tweet that the market deemed material rather than the allegedly false information. For example, on August 13, 2018, Mr. Musk provided further detail regarding the proposed transaction.

Similarly, a public sell-side analyst from Barclays noted that Mr. Musk's August 13, 2018 blog post "made it clear that the funding was in its very early stages." (Ex. M.) Yet, despite the purported revelation that funding was far different than Plaintiff's theory of what the market understood "funding secured" to mean, Tesla's stock did not decline in a statistically significant manner. (Ex. L at ¶¶ 100-108.)

Because Plaintiff does not even attempt to produce evidence regarding the purported materiality of any of the other alleged misstatements—another basis to deny summary judgment—Defendants respond solely to the materiality allegations regarding "funding secured."

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Thus, the jury is entitled to conclude that the lack of *any decline* following these purported revelations regarding the meaning of "funding secured" proves that the "funding secured" portion of Mr. Musk's tweet was immaterial. *Teamster*, 320 F.3d at 949 ("[T]he static or dynamic nature of a stock price after the disclosure of previously withheld information is strong evidence of how reasonable investors view the significance of the information.") (Tallman, J., dissenting); *Oran v. Stafford*, 226 F.3d 275, 282 (3d Cir. 2000) ("[I]f a company's disclosure of information has no effect on stock prices, 'it follows that the information disclosed . . . was immaterial as a matter of law.") (Alito, J.) (citation omitted). Accordingly, because there is a genuine issue of dispute regarding the materiality of the allegedly false information, there is a genuine issue of dispute regarding whether the fraud-on-the-market presumption can be invoked and whether reliance can be established. *Hsingching Hsu v. Puma Biotechnology, Inc.*, 2018 WL 4945703, at \*4-5 (C.D. Cal. Oct. 5, 2018) (denying summary judgment on reliance through fraud-on-the-market presumption where material disputes regarding materiality).<sup>14</sup>

## B. There is a Genuine Dispute of Fact Regarding Defendants' Ability to Rebut Any Fraud-On-The-Market Presumption.

Even assuming Plaintiff had established all of the necessary requirements to invoke the fraud-

Plaintiff's authorities are not to the contrary. In the sole case in which a court granted a plaintiff summary judgment on the issue of reliance, In re Celestica Inc. Sec. Litig., 2014 WL 4160216 (S.D.N.Y. Aug. 20, 2014), "Defendants opposed Plaintiffs' motion [solely] on the basis that the Supreme Court's decision in *Halliburton* . . . , might overrule *Basic* and change the law regarding the fraud on the market presumption," which did not occur. *Id.* at \*5 n.3. They did not oppose the motion on the basis that the allegedly false information was immaterial, as Defendants do here. In Kaplan v. Rose, 49 F.3d 1363, 1378 (9th Cir. 1994), abrogated on other grounds by City of Dearborn Heights Act 345 Police & Fire Ret. Sys. v. Align Tech., Inc., 856 F.3d 605 (9th Cir. 2017), the court partially affirmed defendants' motion for summary judgment on the inapplicability of the fraud-onthe-market presumption and overturned in part noting that "claims based on fraud on the market theory are fact-specific and generally for the trier of fact to decide." Similarly, in McCrary, 2014 WL 12561600 at \*12, the court denied plaintiff's request for summary judgment on the issue of reliance precisely because the presumption of reliance under the relevant law in that case, like this one, required proof of materiality, which "is generally a question of fact for the jury." (quotation omitted). Finally, in In re Infineon Techs. AG Sec. Litig., 266 F.R.D. 386 (N.D. Cal. 2009) did not even involve a summary judgment motion on the issue of reliance.

on-the-market presumption—he has not—that would still be insufficient to grant summary judgment on the issue of reliance since the presumption is *rebuttable*. Although Plaintiff claims that "Defendants did not contest any of Dr. Hartzmark's findings or Plaintiff's contention that Tesla's stock traded in an efficient market" (Mot. at 24), Plaintiff overlooks that Defendants can also rebut the presumption if the "market makers' were privy to the truth" about information allegedly concealed, or second, if "news of [the allegedly concealed truth] credibly entered the market and dissipated the effects of the misstatement." *In re Allstate Corp. Sec. Litig.*, 966 F.3d 595, 606 (7th Cir. 2020) (citation omitted). "Under the first option, the defense shows that only true information was impounded in the market price at the time of purchase; the second option does the same by the time of sale." *Id.* Here, there are genuine issues of fact with respect to both defenses.

First, Defendants' expert put forward evidence that the market understood from the beginning that the entire proposal and source of funding was uncertain. (Ex. N at ¶¶ 15-22.) Thus, there is sufficient evidence from which the jury can infer that market understood that funding secured did not mean that there was some sort of signed term sheet or formal agreement regarding funding.

Second, as noted above, following Mr. Musk's August 13 blog post, Tesla's stock did not decline. Thus, the jury is entitled to infer that either the original statement was immaterial to begin with—in which case the presumption does not apply—or that by virtue of, among other things the evidence detailed in the Fischel Report, the market understood the truth regarding the meaning of "funding secured" prior to the August 13 blog post—in which case the presumption is also rebutted. Either way, as the Supreme Court has recognized, these defenses should be heard at trial. *Basic*, 485 U.S. at 249 & n. 29 (proof that information "credibly entered the market and dissipated the effects of the misstatements" "is a matter for trial."). Accordingly, Plaintiff's request for summary judgment with respect to the element of reliance should be denied. 15

Plaintiff's Motion is defective on other grounds as well. First, Plaintiff seeks summary judgment against both Tesla and Mr. Musk, but Plaintiff failed to include any evidence that Tesla had "ultimate authority over [Mr. Musk's] statement [concerning going private], including its content and whether and how to communicate it." *Janus Cap. Grp., Inc. v. First Derivative Traders*, 564 U.S. 135, 142 (2011). On this basis alone Plaintiff's Motion must be denied as to Tesla. Second, while the Motion purports to be against Tesla's board members (as well as Tesla and Mr. Musk), the relief

1		CONCLUSION	
2	For the foregoing reasons, Defendants respectfully request that the Court deny in its entirety		
3	Plaintiff's Motion for Partial Summ	ary Judgment.	
4			
5	DATED: February 1, 2022	Respectfully submitted,	
6		QUINN EMANUEL URQUHART & SULLIVAN, LLP	
7		By: /s/ Alex Spiro	
8		Alex Spiro (appearing pro hac vice)	
9		Attorneys for Tesla, Inc., Elon Musk, Brad W. Buss, Robyn Denholm, Ira Ehrenpreis, Antonio J. Gracias,	
10		James Murdoch, Kimbal Musk, And Linda Johnson Rice	
11			
12			
13		<u>ATTESTATION</u>	
14	I, Kyle K. Batter, am the EC	F user whose ID and password are being used to file the above	
15	document. In compliance with Loca	al Rule 5-1(h)(3), I hereby attest that Alex Spiro has concurred	
16	in the filing of the above document.		
17		/s/ Kyle K. Batter	
18		Kyle K. Batter	
19			
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21			
22			
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24			
25			
26			
27   28	sought is limited to the claims aga defendants have no place in Plaintif	inst Tesla and Mr. Musk. (Notice of Motion.) The director f's Motion.	
		26 Case No. 3:18 ev. 0/865 EMG	

## EXHIBIT V

## EXHIBIT "E"

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Page 1
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 7
     Transcription of YouTube Video: Elon Musk talks
     Twitter, Tesla and the future - live at TED2022
 8
 9
10
                        Video Link:
       https://www.youtube.com/watch?v=cdZZpaB2kDM
11
12
13
                      Runtime: 54:45
14
                         April 14th, 2022
                  Date:
15
               Transcription Begins: 27:00
16
                Transcription Ends: 31:40
17
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Page 2 1 MR. MUSK: So, I don't know. I just sort of like tweet out things that are interesting, or funny, or you know. And 3 then people seem to like it. 4 MR. ANDERSON: So, if you are 5 unsuccessful, -- actually, let me -- before 6 I ask that, let me ask this. In fact, I 7 don't -- so, how can I say, is funding 9 secured? 10 MR. MUSK: I have sufficient assets to complete the -- it's not a forward-looking 11 statement, blah, blah, l have suff--12 13 I mean, I can do it if possible. 14 MR. ANDERSON: Right. 15 MR. MUSK: So, -- and I mean, I should say actually, even in the -- or originally 16 the -- with Tesla back in the day, funding 17 was actually secured. I want to be clear 18 about that. In fact, this may be a good 19 20 opportunity to clarify that. Funding was indeed secured, and I should say, like, why 21 22 do I not have respect for the SEC in that 23 situation. And I don't mean to blame 24 everyone at the SEC, but certainly the San 25 Francisco office. It's because the SEC knew

- 1 that the funding was secured, but they
- 2 pursued the -- an active public
- 3 investigation none the less. At the time,
- 4 Tesla was in a precarious financial
- 5 situation, and I was told by the banks that
- 6 if I did not agree to settle with the SEC,
- 7 that they would -- the banks would cease
- 8 providing working capital and Tesla would go
- 9 bankrupt immediately. So, that's like
- 10 having a gun to your child's head. So, I
- 11 was forced to concede to the SEC,
- 12 unlawfully, those bastards. And now, they -
- 13 it makes it look like I lied, when I did
- 14 not in fact lie. I was forced to admit that
- 15 I lied for -- to save Tesla's life and
- 16 that's the only reason.
- 17 MR. ANDERSON: Given what's actually
- 18 happened -- given what's actually happened
- 19 to Tesla since then though, aren't you glad
- 20 that you didn't take it private?
- 21 MR. MUSK: Yeah. I mean, the -- it's
- 22 simple to put yourself in the position at
- 23 the time, Tesla was under the most
- 24 relentless short seller attack in the
- 25 history of the stock market. There's

- 1 something called a short and distort, where
- 2 the barrage of negativity that Tesla was
- 3 experiencing from short sellers on Wall
- 4 Street was beyond (inaudible) -- Tesla was
- 5 the most shorted stock in the history of the
- 6 stock market.
- 7 MR. ANDERSON: Yeah.
- 8 MR. MUSK: This is saying something.
- 9 So, you know, this was affecting our ability
- 10 to hire people, it was affecting our ability
- 11 to sell cars, it was -- there were -- yeah,
- 12 it was terrible. The -- yeah, they wanted
- 13 Tesla to die so bad they could taste it.
- MR. ANDERSON: Well, most of them have
- 15 paid the price.
- MR. MUSK: Yes. How they -- where are
- 17 they now?
- MR. ANDERSON: So, that was a very
- 19 strong statement. I mean, obviously, a lot
- 20 of people who support you, I would have
- 21 thought would say, you have so much to offer
- 22 the world on the upside -- on the vision
- 23 side, don't waste your time getting
- 24 distracted by these battles that bring out
- 25 negativity and make people feel that you're

- 1 being defensive or -- you know, people don't
- 2 like fights, especially with powerful
- 3 government authorities, they would rather --
- 4 they would rather buy into your -- to a
- 5 dream. Do you -- do you -- like, aren't you
- 6 encouraged by people, just to edit that --
- 7 in that, you know, temptation out and go
- 8 with the bigger story?
- 9 MR. MUSK: Well, I mean, I'm -- I would
- 10 say like, you know, I'm sort of a mixed bag,
- 11 you know? I mean, what --
- MR. ANDERSON: Well, you're a fighter
- 13 and you don't -- you don't like to lose, and
- 14 you are determined that you don't,
- 15 basically. I mean, you are --
- MR. MUSK: Sure, I don't like to lose.
- 17 I'm not sure many people do. They -- but
- 18 the truth matters to me a lot. Like really,
- 19 -- like I -- sort of pathologically, it
- 20 matters to me.
- MR. ANDERSON: Okay, so you don't like
- 22 to lose. If in this case you are not
- 23 successful and, you know, the board does not
- 24 accept your offer, you have said you won't
- 25 go higher, is there a plan B?

```
Page 6
 1
          MR. MUSK: There is.
          MR. ANDERSON: I think we -- I think we
     would like to hear a little bit about plan
 3
 4
     В.
 5
          MR. MUSK: For a -- for another time, I
     think.
 6
 7
          MR. ANDERSON: Another time?
         MR. MUSK: Yeah.
 8
 9
                 (End of recording.)
10
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1	CERTIFICATE	Page 7
2		
3		
4		
5	I, Alexandria Brobst, Transcriptionist,	
6	do hereby certify that I was authorized to	
7	and did listen to and transcribe the	
8	foregoing recorded proceedings and that the	
9	transcript is a true record to the best of	
10	my professional ability.	
11		
12	Dated this 15th day of April, 2022.	
13		
14		
15	al . R. l+	
16	Alexandria Brobst	
17	Alexandria Brobst	
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## EXHIBIT W

#### IN RE TESLA, INC. SECURITIES LITIGATION CASE NO. 18-CV-04865-EMC

#### DEFENDANTS' TRIAL WITNESS LIST<sup>1</sup>

Name	Substance of Testimony	Estimated Length of Testimony
Elon Musk	Mr. Musk is Tesla's founder and CEO. Mr. Musk will testify regarding, among other things, the statements at issue in this case and background related thereto; facts related to the materiality of the statements challenged by Plaintiff, and to whether those statements altered the total mix of information available, including relative to the events that took place between July 31, 2018 and August 17, 2018; the potential go-private transaction and communications related thereto; facts related to the capacity in which Mr. Musk acted when he made communications, including the statements challenged by Plaintiff; facts related to the board's good faith; and facts related to whether the board directly or indirectly controlled Mr. Musk's Twitter account.	~4.0 hours
Sam Teller	Mr. Teller is Tesla's former Director of the Office of the CEO. Defendants expect that Mr. Teller will testify regarding the statements at issue in this case and background related thereto; facts related to the materiality of the statements challenged by Plaintiff, and to whether those statements altered the total mix of information available, including relative to the events that took place between July 31, 2018 and August 17, 2018; and the potential go-private transaction and communications related thereto.	~1.5 hours
Deepak Ahuja	Mr. Ahuja is Tesla's former Chief Financial Officer. Defendants expect that Mr. Ahuja will testify regarding, among other things, the statements at issue in this case and background related thereto; facts related to the materiality of the statements challenged by Plaintiff, and to whether those statements altered the total mix of information available, including relative to the events that took place between July 31, 2018 and August 17, 2018; and the potential go-private transaction and communications related thereto	~1.0 hours

<sup>&</sup>lt;sup>1</sup> Defendants' timing estimates may change based on Plaintiff's presentation at trial. Defendants reserve the right to add or subtract witnesses based on developments in the case, including any rulings by the Court, and to call any witnesses listed by Plaintiff on his witness list. Defendants intend to counter-designate deposition testimony from any witness presented by Plaintiff by deposition. Defendants reserve the right to call by deposition any listed witness not called live.

Robyn Denholm	Ms. Denholm is a member of Tesla's Board of Directors. Ms. Denholm will testify regarding, among other things, her experience as a member of Tesla's Board of Directors, Mr. Musk's communications with the board regarding the potential go-private transaction, board meetings and communications regarding the potential go-private transaction, facts related to whether the Board of Directors directly or indirectly controlled Mr. Musk's Twitter account, and facts related to whether the Board of Directors acted in good faith.	~0.5 hours
Ira Ehrenpreis	Mr. Ehrenpreis is a member of Tesla's Board of Directors. Mr. Ehrenpreis will testify regarding, among other things, his experience as a member of Tesla's Board of Directors, Mr. Musk's communications with the board regarding the potential go-private transaction, board meetings and communications regarding the potential go-private transaction, facts related to whether the Board of Directors directly or indirectly controlled Mr. Musk's Twitter account, and facts related to whether the Board of Directors acted in good faith.	~0.5 hours
James Murdoch	Mr. Murdoch is a member of Tesla's Board of Directors. Mr. Murdoch will testify regarding, among other things, his experience as a member of Tesla's Board of Directors, Mr. Musk's communications with the board regarding the potential go-private transaction, board meetings and communications regarding the potential go-private transaction, facts related to whether the Board of Directors directly or indirectly controlled Mr. Musk's Twitter account, and facts related to whether the Board of Directors acted in good faith.	~0.5 hours
Kimbal Musk	Kimbal Musk is a member of Tesla's Board of Directors. Mr. Musk will testify regarding, among other things, his experience as a member of Tesla's Board of Directors, Mr. Musk's communications with the board regarding the potential go-private transaction, board meetings and communications regarding the potential go-private transaction, facts related to whether the Board of Directors directly or indirectly controlled Mr. Musk's Twitter account, and facts related to whether the Board of Directors acted in good faith.	~0.5 hours
Antonio Gracias	Mr. Gracias is a former member of Tesla's Board of Directors. Mr. Gracias will testify regarding, among other things, his experience as a member of Tesla's Board of Directors, Mr. Musk's communications with the board regarding the potential go-private transaction, board meetings and communications regarding the potential go-private transaction, facts related to whether the Board of Directors directly or indirectly controlled Mr. Musk's Twitter account, and facts related to whether the Board of Directors acted in good faith.	~0.5 hours

Brad Buss	Mr. Buss is a former member of Tesla's Board of Directors. Mr. Buss will testify regarding, among other things, his experience as a member of Tesla's Board of Directors, Mr. Musk's communications with the board regarding the potential go-private transaction, board meetings and communications regarding the potential go-private transaction, facts related to whether the Board of Directors directly or indirectly controlled Mr. Musk's Twitter account, and facts related to whether the Board of Directors acted in good faith.	~0.5 hours
Linda Johnson Rice	Ms. Johnson Rice is a former member of Tesla's Board of Directors. Ms. Johnson Rice will testify regarding, among other things, her experience as a member of Tesla's Board of Directors, Mr. Musk's communications with the board regarding the potential go-private transaction, board meetings and communications regarding the potential go-private transaction, facts related to whether the Board of Directors directly or indirectly controlled Mr. Musk's Twitter account, and facts related to whether the Board of Directors acted in good faith.	~0.5 hours
Larry Ellison	Mr. Ellison is a former member of Tesla's Board of Directors.  Defendants expect that Mr. Ellison will testify regarding the potential go-private transaction and communications related thereto.	~0.5 hours
JB Straubel	Mr. Straubel is a Tesla co-founder and its former Chief Technology Officer. Defendants expect that Mr. Straubel will testify regarding, among other things, the potential go-private transaction and communications related thereto.	~0.5 hours
Egon Durban	Mr. Durban is a Managing Partner at Silver Lake Partners. Defendants expect that Mr. Durban will testify regarding, among other things, the potential go-private transaction and communications related thereto.	~1 hour
Dan Dees	Mr. Dees is Co-Head of Global Investment Banking at Goldman Sachs. Defendants expect that Mr. Dees will testify regarding, among other things, the potential go-private transaction and communications related thereto.	~1 hour
Rick Polhemus	Mr. Polhemus is a Managing Director at Morgan Stanley. Defendants expect that Mr. Polhemus will testify regarding, among other things, the potential go-private transaction and other transactions and communications related thereto.	~1 hour
		L

Daniel R. Fischel	Mr. Fischel has been identified as one of Defendants' expert witnesses, and his opinions are disclosed in his expert reports. Defendants expect Mr. Fischel will testify, among other things, that Mr. Musk's actions in August 2018 were consistent with his prior-stated interest in taking Tesla private and in protecting investors who believed in his vision, it was reasonable to believe that the proposed go-private transaction would have been funded if it moved forward, the \$420 potential offer price was reasonable, and neither Mr. Musk nor the other Defendants benefited from the fraud that Plaintiff alleges.  Mr. Fischel will also offer critiques of the opinions of Dr. Hartzmark (should he be permitted to testify), Professor Mitts, and Professor Subramanian.	~2 hours
Amit Seru	Professor Seru has been identified as one of Defendants' expert witnesses, and his opinions are disclosed in his expert reports. Defendants expect Professor Seru will testify, among other things, that Professor Heston's methodology for estimating damages to Tesla option holders is fundamentally flawed in the context of a merger or acquisition deal, and that Professor Heston's other opinions are speculative, unsupported by academic literature, and fail to use actual prices to measure damages.  Assuming Dr. Hartzmark is permitted to testify, Defendants expect Professor Seru will testify, among other things, that Dr. Hartzmark's implementation of Professor Heston's methodology is similarly speculative, unreliable, and inaccurate.	~1.5 hours
Yasir Al- Rumayyan	Mr. Al-Rumayyan is the Governor of the PIF, the sovereign wealth fund of the Kingdom of Saudi Arabia. Defendants expect that Mr. Al-Rumayyan will testify regarding the potential go-private transaction and communications related thereto.	~1 hour
Saad Al Jarboa	Mr. Al Jarboa is employed by the PIF. Defendants expect that Mr. Al Jarboa will testify regarding the potential go-private transaction and communications related thereto.	~0.5 hours
Naif Al Mogren	Mr. Al Mogren is employed by the PIF. Defendants expect that Mr. Al Mogren will testify regarding the potential go-private transaction and communications related thereto.	~0.5 hours
Turqi Alnowaiser	Mr. Alnowaiser is employed by the PIF. Defendants expect that Mr. Alnowaiser will testify regarding the potential go-private transaction and communications related thereto.	~0.5 hours

Glen Littleton	Mr. Littleton is the class plaintiff. Defendants plan to cross-examine Mr. Littleton.	~1.5 hours
Guhan Subramanian	Professor Subramanian has been identified as one of Plaintiff's expert witnesses. Defendants plan to cross-examine Professor Subramanian.	~1 hour
Joshua Mitts	Professor Mitts has been identified as one of Plaintiff's expert witnesses. Defendants plan to cross-examine Professor Mitts.	~1 hour
Steven Heston	Dr. Heston has been identified as one of Plaintiff's expert witnesses. Defendants plan to cross-examine Dr. Heston.	~1 hour
Michael Hartzmark	Dr. Hartzmark has been identified as one of Plaintiff's expert witnesses. Defendants plan to cross-examine Dr. Hartzmark.	~2 hours
<b>Timothy Fries</b>	Mr. Fries is on Plaintiff's witness list. Defendants plan to cross-examine Mr. Fries.	~1.5 hours
Dave Arnold	Mr. Arnold is on Plaintiff's witness list. Defendants plan to cross-examine Mr. Arnold.	~0.5 hours
Martin Viecha	Mr. Viecha is on Plaintiff's witness list. Defendants plan to cross examine Mr. Viecha.	~0.5 hours
Aaron Chew (By Deposition)	Mr. Chew is on Plaintiff's witness list. Defendants plan to cross-examine Mr. Chew.	~0.5 hours
Ryan Brinkman (By Deposition)	Mr. Brinkman is on Plaintiff's witness list. Defendants plan to cross-examine Mr. Brinkman.	~0.5 hours
Joseph Fath (By Deposition)	Mr. Fath is on Plaintiff's witness list. Defendants plan to cross-examine Mr. Fath.	~0.5 hours
Nii Owuraka Koney (By Deposition)	Mr. Koney is on Plaintiff's witness list. Defendants plan to cross-examine Mr. Koney.	~0.5 hours

## EXHIBIT X

# EXCERPTS FROM THE DEPOSITION OF SAM TELLER TAKEN AUGUST 11, 2021

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Page 1
1
       UNITED STATES DISTRICT COURT
2
    FOR THE NORTHERN DISTRICT OF CALIFORNIA
3
         SAN FRANCISCO DIVISION
4 In Re:
5
        TESLA, INC.
                         Civil Action No.
                    3:18-cv-04865-EMC
        SECURITIES LITIGATION
7
8
     *** CONFIDENTIAL ***
10
11
12
13 CONFIDENTIAL REMOTE VIDEOTAPED DEPOSITION OF
14
            SAM TELLER
      Roberts Creek, British Columbia
15
        Wednesday, August 11, 2021
16
17
18
19
20
21
22 Reported by:
23 THOMAS A. FERNICOLA, RPR
24 JOB NO. 198117
25
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Case 3:18-cv-04865-EMC Document 485, Filed 09/20/22 Page 355 of 638 Page 6 SAM TELLER, called as a witness, having been duly sworn by a Notary Public, was examined and testified as follows: BY THE REPORTER: 6 Q Please state your full name and 7 address for the record. Sam Teller, 1417 Kellam Avenue, 8 9 Los Angeles, California 90026. 10 BY MS. TRIPODI: 11 Good morning, again, Mr. Teller. Q 12 As I stated before, my name is Elizabeth Tripodi. I'm with the Law Firm Levi & 13 14 Korsinsky, and I represent Plaintiff Glen Littleton in an action titled In Re: Tesla 15 Securities Litigation. 16 The action is currently pending in 17 18 the United States District Court for the 19 Northern District of California. 20 Mr. Teller, where are you located

- 21 for today's deposition?
- 22 A I'm in Roberts Creek, British
- 23 Columbia in Canada.
- 24 Q Before we begin, I just want to go
- 25 over some basic ground rules for the

- 1 Q Do you recall whether the team
- 2 coalescing occurred after Elon's tweeting on
- 3 August 7 about taking the company private
- 4 at \$420?
- 5 A You know, I'd have to see some
- 6 documents or something to remember. I don't
- 7 remember if it was in that week, you know,
- 8 those five days prior or just after,
- 9 actually.
- 10 Q So during the period of August 3,
- 11 2018, through August 7, 2018, am I correct
- 12 that you were traveling?
- 13 A Yes. I was at a wedding in New
- 14 Hampshire, and I returned to the West Coast
- 15 on the morning of the 7th.
- 16 Q Do you generally recall what your
- 17 itinerary was for that travel?
- 18 A I think I flew to Boston, drove to
- 19 New Hampshire. I flew to -- to New
- 20 Hampshire, right.
- 21 I think I flew to Boston, drove to
- 22 New Hampshire, and then I drove back to
- 23 New York, and then flew home two nights
- 24 later from New York to San Francisco to
- 25 Reno.

Page 186 1 Q During the time that you were traveling, were you working? 3 I was always working during those times. It wasn't nonstop but, you know, I'm sure if you looked back at my email, I sent a handful of emails straight through the wedding, you know. So work was something that was always with me in small ways. 9 Q Do you recall specifically anything related to the potential 10 11 going-private transaction while you were 12 traveling? 13 I don't remember any conversations specifically about the take-private 14 transaction during the time while I was on 15 16 the East Coast. 17 (Plaintiff's Exhibit 110, Document 18 Bates TESLA LITTLETON Ending 6319, was marked for identification.) 19 20 I'll have you turn back to your text messages which had been marked as 21 Exhibit 110, and in the ShareFile folder 22 they end in Bates number 6319. 23 24 Yes. 25 Q Exhibit 110, if we can pull that

Page 238 1 Α Yes, my recollection is that there was a call. 3 Q If you will look at your text messages for August 10, 2018, I'm on page 26 of Exhibit 110. 6 Α Okay. 7 If you will look at the message sent from you to Elon at 17:13, which would be 10:13 in the morning of August 10, where 9 you say, "Egon, here in the sun room"? 10 11 Yes. 12 Were you at Elon's house on the Q morning of August 10, 2018? 13 14 Α I was. Do you recall meeting with Egon 15 Durban at Elon's house that morning? 16 17 It was a pretty busy couple days. 18 But, yes, I remember seeing Egon. 19 Q Did you participate in a meeting 20 with Egon that morning at Elon's house? I believe I was there for part of 21 it, but I may not have been there for the entirety of that meeting. 23 24 Do you recall anything from the 25 part of the meeting you attended?

Page 239 1 Α I think that they were discussing -- you know, they were discussing 3 the take-private transaction talking about how Silver Lake could be involved. 4 5 I don't remember specific details 6 beyond that. We were talking about the 7 transaction and working with Silver Lake. 8 Do you recall there being other 9 meetings at Mr. Musk's home that Friday, August 10? 10 11 There were a lot of calls. I don't remember if there were other in-person 13 meetings, but if my memory serves me correctly, we did a number of calls. There 15 was that meeting, and at some point we left 16 for Las Vegas that afternoon. 17 What was going on in Las Vegas? 18 There was a hacker conference, 19 kind of an engineering cybersecurity conference that Elon agreed to do a 20 21 recruiting event for Tesla and SpaceX. 22 Q If you will turn to page 28 of your text messages, looking at the last text 23

message that's timestamped 18:10 UTC time,

which I believe is 11:10 a.m. Pacific Time,

24

25

Page 242 trying to think of him -- I don't have a memory of that. 3 Looking down at your text 4 messages, from it's 8:45 you to Elissa Butterfield. On that same, page 29. It says "just did Yasir"? 6 7 Uh-huh. 8 Q Was that referring to the call between Elon and Yasir on August 10? 10 Α Correct. Were you on that call? 11 Q 12 My recollection is that I was on the phone with Shihana, and Yasir called 13 Elon on his cell, and we were in adjacent 14 rooms with the door open. 15 16 So I was on the phone with Shihana. And I heard Elon begin a call. I 17 don't remember if I knew immediately that it 18 19 was Yasir. 20 In any case, Shihana and I wrapped up our call, and I went into the next room 21 to join Elon who was two or three or a few 22 23 minutes into his call with Yasir. 24 Do you recall what you heard on the call that Elon was having with Yasir? 25

		Page 2
1	A I remember a couple things. The	S
2	first thing I remember is that Yasir was	
3	talking about some process, steps that would	
4	be involved on their end for the	
5	transaction.	
6	So he was saying something to the	
7	effect of, "Well, we have to get approval	
8	from X, and we have to run it by Y."	
9	I don't remember what the specific	
10	words he used were, but, you know, the	
11	overall takeaway was that Yasir was not, in	
12		
13	news to us. And Elon silently kind of made	
14	a gesture to me like signaling like	
15	what's he talking about? Like, I guess you	
16	could summarize it as like a WTF.	
17	And so, yes, that was the first	
18	thing Yasir was basically indicating, that	
19	from a process perspective there was a	
20	little more work that had to be done on his	
21	end to advance the transaction.	
22	The second thing was that he was	
23	very clear and unequivocal about his intent	
24	with regard to doing the transaction, which	
25	was he and they remained totally excited, on	

1	A	Okov	Page 261
		Okay.	
2	Q	And this is a text sent on	
3	Augus	st 12, 2018, 17:13 UTC time, which would	
4	be 10:	:13 a.m. on August 12.	
5		This is a series of text messages	
6	betwe	en Yasir and Elon, and Elon tells	
7	Yasir:		
8		"You are throwing me under the	
9	bus."		
10		Do you see that?	
11	Α	Yes.	
12	Q	And then later in the text chain,	
13	Elon	texts:	
14		"Sorry, it's over."	
15		Do you see that?	
16	Α	Uh-huh.	
17	Q	Did you have discussions with Elon	
18	regar	ding him ending conversations with the	
19	Saud	i PIF?	
20		MR. GIBBS: Objection. Lack of	
21	fou	undation. Assumes facts.	
22	Α	Yes, it's not clear to me that	
23	this m	neans that he was ending all	
24	conve	ersations with PIF. But, in any case, I	
25	didn't	discuss this text message with him	

```
Page 270
 1
 2.
           CERTIFICATE
 3
 4
     STATE OF NEW YORK
 5
                         ) ss.:
 6
     COUNTY OF NEW YORK )
 7
           I, THOMAS A. FERNICOLA, Registered
 8
 9
     Reporter and Notary Public within and
10
     for the State of New York, do hereby
11
     certify that the within is a true and
12
     accurate transcript of the proceedings
13
     held on Wednesday, August 11, 2021.
14
           That I am not related to any of
15
     the parties to this action by blood or
16
     marriage; and that I am in no way
     interested in the outcome of this
17
18
     matter.
           IN WITNESS WHEREOF, I have
19
20
     hereunto set my hand this 23rd day of
21
     August 2021.
22
23
24
                    THOMAS A. FERNICOLA, RPR
25
```

### EXHIBIT Y

# EXCERPTS FROM THE DEPOSITION OF ROBYN DENHOLM TAKEN OCTOBER 5, 2021

1	Page 1 IN THE UNITED STATES DISTRICT COURT
2	FOR THE NORTHERN DISTRICT OF CALIFORNIA
3	SAN FRANCISCO DIVISION
4	IN RE: TESLA, INC. ) CIVIL ACTION NO:
5	SECURITIES LITIGATION ) 3:18-cv-04865-EMC
6	
7	
8	VIDEOTAPED AND REMOTE ORAL DEPOSITION OF
9	ROBYN DENHOLM
10	OCTOBER 5, 2021
11	
12	VIDEOTAPED AND REMOTE ORAL DEPOSITION OF ROBYN
13	DENHOLM, produced as a witness at the instance of the
14	PLAINTIFFS, and duly sworn, was taken in the above-styled
15	and numbered cause on the 5th day of October, 2021, from
16	10:51 a.m. to 3:21 p.m., before Kathryn R. Baker, CSR,
17	RPR, in and for the State of Texas, reported by machine
18	shorthand in the City of Austin, State of Texas, pursuant
19	to the Federal Rules of Civil Procedure.
20	
21	*CONFIDENTIAL PURSUANT TO PROTECTIVE ORDER*
22	*REVISED*
23	
24	REPORTED BY KATHRYN R. BAKER, RPR, CSR
25	JOB #200188

Page 8 also of Levi & Korsinsky. 1 And plaintiffs stipulate to the validity. MR. GIBBS: Good morning. This is Patrick 3 Gibbs from Cooley on behalf of the defendants in the case, 4 including Ms. Denholm. Also with me today are Josh 5 Walden, also from Cooley, and Candice Jackman, in-house 6 counsel from Tesla. 7 We also stipulate to the remote deposition 8 proceeding. 9 10 THE VIDEOGRAPHER: Thank you very much. If the court reporter will please swear in 11 the witness. 12 13 ROBYN DENHOLM, having been first duly sworn, testified as follows: 14 15 EXAMINATION 16 BY MS. TRIPODI: Good morning, again, Ms. Denholm. As I stated, 17 my name is Elizabeth Tripodi, and I represent the 18 plaintiff, Glen Littleton, in this matter. 19 Would you please put your full name on the 20 record. 21 My full name is Robyn Mary Elston Denholm. 22 Α. And what is your residential address? 23 Ο. 24 Α.

- 1 Q. And did you ever come to learn whether counsel
- 2 had indicated to Elon that he was allowed to tweet this
- 3 information? That is a yes-or-no question.
- 4 A. I -- I -- I don't -- I don't think so. So it
- 5 would be a no. So, yeah.
- 6 Q. Did you ever learn whether Elon had discussed
- 7 making this tweet with anyone?
- 8 A. I don't recall him discussing the tweet with
- 9 anyone, but I -- I don't know.
- 10 Q. With respect to the funding secured in the tweet
- in Exhibit 8, did you have an understanding of what that
- 12 meant?
- 13 A. Only with the context of what we discussed in
- 14 the board the previous week in terms of having sources of
- 15 funding for a take-private transaction if that were to
- 16 occur.
- Q. So did you understand funding secured in this
- 18 tweet to mean that funding was available?
- 19 A. Yes.
- Q. In your past experience with M&A transactions,
- 21 were the terms "funding secured" ever used to your
- 22 recollection?
- A. Not -- not that I recall, no.
- Q. In the M&A transactions that you may have had
- 25 experience with in the past, was funding something that

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Page 143
1
                IN THE UNITED STATES DISTRICT COURT
              FOR THE NORTHERN DISTRICT OF CALIFORNIA
 3
                      SAN FRANCISCO DIVISION
 4
    IN RE: TESLA, INC.
                                ) CIVIL ACTION NO:
 5
                                ) 3:18-cv-04865-EMC
    SECURITIES LITIGATION
 6
 7
               REPORTER'S CERTIFICATION
 8
 9
                 ORAL DEPOSITION OF ROBYN DENHOLM
10
                         OCTOBER 5, 2021
11
                   (CONDUCTED REMOTELY VIA ZOOM)
               12
13
              I, Kathryn R. Baker, RPR, a Certified Shorthand
14
    Reporter in and for the State of Texas, hereby certify to
15
    the following:
16
              That the witness, ROBYN DENHOLM, was duly sworn
    by the officer and that the transcript of the oral
17
    deposition is a true record of the testimony given by the
18
    witness;
19
20
              I further certify that pursuant to FRCP Rule
    30(f)(1) that the signature of the deponent:
21
22
              _X_ was requested by the deponent or a party
    before the completion of the deposition and is to be
23
24
    returned within 30 days from the date of receipt of the
25
    transcript. If returned, the attached Errata contain any
```

1	Page 144 changes and the reasons therefor;
2	was not requested by the deponent or a party
3	before the completion of the deposition.
4	I further certify that I am neither counsel for,
5	related to, nor employed by any of the parties or
6	attorneys in the action in which this proceeding was
7	taken, and further that I am not financially or otherwise
8	interested in the outcome of the action;
9	Subscribed and sworn to on this 16th day of
10	October, 2021.
11	Frank R Bur
12	KATHRYN R. BAKER, RPR, CSR #6955
13	Expiration Date: 04/30/2023 Firm Registration No. 615
14	TSG Reporting
15	
16	
17	
18	
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22	
23	
24	
25	

### EXHIBIT Z

# EXCERPTS FROM THE DEPOSITION OF IRA EHRENPREIS TAKEN AUGUST 25, 2021

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Page 1
 1
                UNITED STATES DISTRICT COURT
 2
          FOR THE NORTHERN DISTRICT OF CALIFORNIA
                   SAN FRANCISCO DIVISION
     ----x
 5
    IN RE TESLA, INC.
 6
    SECURITIES LITIGATION
                                 ) Civil Action No.
 7
                                 ) 3:18-cv-04865-EMC
 8
 9
10
11
          VIDEOTAPED VIDEOCONFERENCE DEPOSITION OF
12
                       IRA EHRENPREIS
13
                 Wednesday, August 25, 2021
14
15
                        CONFIDENTIAL
16
17
18
19
20
21
22
23 Reported By:
24 SUSAN A. SULLIVAN, CSR #3522, RPR, CRR
25 Job No. 198695
```

Page 6 1 agree to reserve evidentiary objections and as we have done in past depositions, we will be reserving 3 our right to challenge any confidentiality 4 designation. 5 THE VIDEOGRAPHER: Thank you. 6 Will reporter please swear in the witness. 7 8 IRA EHRENPREIS, called as a witness, having been duly sworn by 9 10 the court reporter, was examined and testified 11 as follows: 12 13 EXAMINATION BY MS. TRIPODI: 14 Good morning again, Mr. Ehrenpreis. 15 0 16 As I stated before, my name is Elizabeth Tripodi and I'm with the law firm Levi & Korsinsky. 17 I represent Plaintiff Glen Littleton in the 18 securities transaction In Re Tesla, Inc. which is 19 20 currently pending in the United States District Court for the Northern District of California. 21 22 Would you please state your full name for 23 the record. 24 Ira Ehrenpreis. Α 25 What is your residence address? Q

- 1 Q And with respect to the funding secured,
- 2 did you understand that to mean the discussion that
- 3 Elon had had with the Saudi PIF?
- 4 A I understood it to mean that -- that he
- 5 didn't feel that the issue was going to be around
- 6 funding as to whether or not taking Tesla private
- 7 could happen; that it was around the other issues
- 8 that he had discussed at the board meeting around
- 9 whether or not there was enough interest from the
- 10 shareholders.
- 11 Q In your opinion is the availability of
- 12 sufficient capital the same as funding secured?
- 13 A That's how I interpreted what he was
- 14 saying.
- 15 Q At this time did you know whether Elon had
- 16 a formal commitment from the Saudi PIF to fund a
- 17 going private?
- 18 A I don't recall. The board at that point
- 19 hadn't received anything formal from Elon.
- 20 Q And do you know whether Elon had received
- 21 anything formal at this time from the Saudi PIF?
- 22 A I don't know.
- Q Did you have any understanding as to why
- 24 Elon made this tweet at this time?
- 25 A Are you asking whether I understood it in

```
Page 154
 1
     questions right now. I may have some further
 2
     questions if your counsel also has questions.
              Patrick?
              MR. GIBBS: I have no questions.
 4
 5
              MS. TRIPODI:
                            Okay.
 6
              THE VIDEOGRAPHER: Off the record then,
 7
     Counsel?
 8
              MS. TRIPODI: Yes, please.
              THE VIDEOGRAPHER: This concludes today's
 9
10
     deposition. We're off the record. The time is
11
     3:36.
12
              THE REPORTER: I have both of your
     standing orders and you wanted to add a rough
13
14
     draft?
15
              MS. TRIPODI: Yes.
16
             MR. GIBBS: Yes.
    ///
17
    ///
18
19 ///
20
                                    IRA EHRENPREIS
21
          Subscribed and sworn to
          before me this day
22
23
          of
                       20 .
24
          (Notary Public) MY COMMISSION EXPIRES: ___
25
```

1		Page 155
1	REPORTER'S CERTIFICATE	
2		
3	I, SUSAN A. SULLIVAN, CALIFORNIA CSR No.	
4	3522, RPR, CRR, do hereby certify:	
5	That prior to being examined IRA	
6	EHRENPREIS, the witness named in the foregoing	
7	deposition, was, before the commencement of the	
8	deposition, duly administered an oath in accordance	
9	with C.C.P. Section 2094;	
10	That the said deposition was taken before	
11	me at the time and place therein set forth, and was	
12	taken down by me in shorthand and thereafter	
13	transcribed into typewriting under my direction and	
14	supervision; that the said deposition is a true and	
15	correct record of the testimony given by the	
16	witness;	
17	I further certify that I am neither	
18	counsel for, nor in any way related to any party to	
19	said action, nor in any way interested in the	
20	outcome thereof.	
21	IN WITNESS WHEREOF, I have subscribed my	
22	name on this 7th day of September, 2021.	
23	Susan a. Sullivan	
24		
25	Susan A. Sullivan	

### EXHIBIT AA

# EXCERPTS FROM THE DEPOSITION OF JAMES MURDOCH TAKEN AUGUST 17, 2021

#### Case 3:18-cv-04865-EMC Document 485 Filed 09/20/22 Page 381 of 638

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Page 1
        IN THE UNITED STATES DISTRICT COURT
 1
      FOR THE NORTHERN DISTRICT OF CALIFORNIA
 3
               SAN FRANCISCO DIVISION
        Civil Action No. 3:18-cv-04865-EMC
 4
 5
 6
     IN RE TESLA, INC.
 7
     SECURITIES LITIGATION
 8
 9
10
11
12
                    CONFIDENTIAL
13
            DEPOSITION OF JAMES MURDOCH
14
    TAKEN REMOTELY BY VIDEO CONFERENCE
15
                  August 17, 2021
16
17
18
19
20
21
22
23
24 Reported by: Mary Ann Payonk, CSR
25
    Job No. 198118
```

```
Page 5
 1
               MR. PORRITT:
                              Good morning.
          Nicholas Porritt of Levi & Korsinsky on
 3
          behalf of the plaintiff and the class.
 4
          With me is Elizabeth Tripodi and Kathy
 5
          Ames, also with Levi & Korsinsky.
               MR. GIBBS: Good morning. This is
 6
 7
          Patrick Gibbs from Cooley on behalf of
          the defendants and the witness. And
 8
          with me also on the line is Bingxin Wu
 9
10
          from Cooley.
11
               MR. PORRITT: And yes, we so
12
          stipulate to the terms of the taking of
13
          this deposition.
14
               MR. GIBBS: Same here.
15
     JAMES MURDOCH,
            called as a witness, having been duly
16
17
            sworn, was examined and testified as
18
            follows:
19
                     EXAMINATION
20
     BY MR. PORRITT:
21
               Good morning, Mr. Murdoch.
          Q.
22
               Good morning.
          Α.
               Would you please state your full name
23
          Q.
24
     for the record.
25
          Α.
               James Rupert Jacob Murdoch.
```

- 1 Q. Had you had any communication with
- 2 Elon Musk between the board meeting on August 3
- 3 and -- and this tweet?
- 4 A. I can't remember.
- 5 Q. When you read "funding secured" in
- 6 this tweet in Exhibit 8 were you surprised to
- 7 see those words?
- 8 A. No, not really. I mean, I -- I was
- 9 surprised to see the whole tweet, going public
- 10 with the whole thing, and going -- kind of
- 11 going wide with it at this point. But later, I
- 12 later, you know, figured out why. No, but it
- 13 was, you know, apropos of our rather -- I guess
- 14 what's the right word to use? In light of the
- 15 discussion that we had at the board regarding
- 16 PIF and other potential shareholders, you know,
- 17 the, you know, the -- the -- the credibility
- 18 and, you know, and -- and belief that, you
- 19 know, capital was there to do such a
- 20 transaction was, you know, I -- I -- you know,
- 21 I shared that. I thought that was -- that was
- 22 reasonable to -- to conclude.
- Q. Is the availability of sufficient
- 24 capital the same thing as securing funding, in
- 25 your mind?

- 1 A. Well, I mean, we can -- I would say
- 2 I'd go stronger than the availability of
- 3 capital. There was the availability of capital
- 4 from interested parties who'd expressed a
- 5 specific interest in doing it and who, you
- 6 know, are, you know, large-scale investors that
- 7 deploy a lot of capital. And a lot of time --
- 8 I've done a lot of work in, you know, in other
- 9 markets and around the world and in the Middle
- 10 East, etc., and oftentimes, you know, you
- 11 have -- you know, you -- you conduct a lot of
- 12 the -- particularly at this stage, you know, a
- 13 lot of the business is, you know, is oral, is,
- 14 you know, is verbal. You have a -- you know,
- 15 you have commitments made and commitments
- 16 honored, etc., so it's -- it wasn't surprising.
- 17 The funding secured was not the part that
- 18 jumped out at me.
- 19 Q. Okay. What was the part that jumped
- 20 out at you?
- 21 A. The existence of the tweet.
- Q. On those transactions that you're
- 23 referring to where, you know, available
- 24 commitments are made, etc., have those -- were
- 25 those transactions or those commitments later

Page 227 1 REPORTER'S CERTIFICATE I, MARY ANN PAYONK, shorthand reporter 3 and Notary Public, do hereby certify that the 4 witness whose deposition is hereinbefore set 5 forth was sworn by agreement of all parties, 6 that the proceedings were reported 7 stenographically by me, and that this transcript is a true, correct, and full record 8 9 of the testimony given. 10 I further certify that I am not related to any of the parties to this action by blood 11 or by marriage, and that I am in no way 12 13 interested in the outcome of this matter. IN WITNESS WHEREOF, I have hereunto set 14 my hand this 27th day of August, 2021. 15 16 17 18 MARY ANN PAYONK, Shorthand Reporter DC 9/30/2025; VA:219251 8/31/2022; CA:13431 19 20 21 22 23 24 25

### EXHIBIT BB

# EXCERPTS FROM THE DEPOSITION OF ANTONIO GRACIAS TAKEN OCTOBER 26, 2021

1	IN THE UNITED STATES DISTRICT COURT	Page 1
2	FOR THE NORTHERN DISTRICT OF CALIFORNIA	
3	SAN FRANCISCO DIVISION	
4		
5	IN RE: TESLA, INC. Civil Action No.	
6	SECURITIES LITIGATION 3:18-cv-04865-EMC	
7	/	
8		
9		
10	CONFIDENTIAL	
11	REMOTE VIDEOTAPED DEPOSITION ANTONIO GRACIAS	
12	MIAMI, FLORIDA	
13	TUESDAY, OCTOBER 26, 2021	
14		
15		
16		
17		
18		
19		
20		
21		
22		
23	REPORTED BY:	
24	DEBORAH HABIAN, RMR, CRR, CLR	
25	JOB NO. 201645	

Page 13 1 ANTONIO GRACIAS, called as a witness herein by the plaintiffs, having been first duly sworn, was examined and 3 testified as follows: 4 5 EXAMINATION 6 BY MS. TRIPODI: Good morning again, Mr. Gracias. 7 stated before, my name is Elizabeth Tripodi, and 8 I'm here on behalf of plaintiff Glen Littleton. 9 10 Would you please state your full name for the record. 11 Antonio Jose Gracias. 12 Α. 13 Q. What is your residential address? 14 Α. Where are you located for today's 16 deposition? 17 In my office in Miami. 18 Α. And can you give us the address of that 19 Q. office, please? 20 That address is (indiscernible) in the 21 Α. Design District in Miami. 22 Have you been deposed before? 23 Ο. 24 Α. I have. 25 When was the most recent time you were Q.

Page 87 1 MR. GIBBS: Objection to form. You can answer. 3 I'm objecting to the form of the 4 question because it's ambiguous as to what "secure" means in that context. But you can 5 6 answer if you understand. 7 THE WITNESS: Repeat the question, please. 8 MS. TRIPODI: Debbie, would you mind 9 reading that back, please? 10 11 Not at all. THE REPORTER: 12 (Record read.) 13 THE WITNESS: Thank you. 14 I had been working with Elon for almost 15 20 years. If he says he has the money, he has the money. As far as I'm concerned, we had the 16 money, yeah. 17 BY MS. TRIPODI: 18 19 So you did not have an understanding 20 that the Saudi PIF would need to conduct further due diligence? 21 22 They already owned 4.9 percent of the company. I presumed they'd done their 23 24 diligence. 25 Q. But am I correct that any due diligence

- 1 they would have done in reaching that
- 2 4.9 percent ownership interest would have been
- 3 via public information?
- 4 A. Yes, but in a public company context,
- 5 we are disclosing all the information necessary,
- 6 and they had the meeting with Elon. So if Elon
- 7 tells me he has the money, I believe he had the
- 8 money.
- 9 Q. Was there any discussion regarding
- 10 regulatory concerns of the Saudi PIF funding the
- 11 entire going private transaction?
- 12 A. Not in this meeting. Not in the -- not
- 13 that I recall in this meeting. I'm actually
- 14 confident of that issue in this meeting, but I'm
- 15 looking at the notes to see if it's discussed or
- 16 not. (Reviewing document.)
- I don't see it in the notes.
- 18 Q. Did Elon provide context as to why he
- 19 believed the Saudis were interested in taking
- 20 Tesla private?
- 21 A. I don't think he needed to as a -- as
- 22 a -- I mean, he talked about it here, but it
- 23 was -- I understand that and I think everyone
- 24 around the table understood that the PIF was
- 25 making very large investments in technology

		Page 168
1	REPORTER CERTIFICATE	_
2	I, Deborah Habian, a Certified Shorthand Reporter within and for the State of	
3	Illinois, do hereby certify:	
4	That previous to the commencement of the examination of the witness, the witness was	
5	duly sworn to testify the whole truth concerning the matters herein;	
6	That the foregoing deposition was	
7	reported stenographically by me, was thereafter reduced to printed transcript by me, and	
8	constitutes a true record of the testimony given and the proceedings had;	
9	That the said deposition was taken	
10	before me at the time and place specified;	
11	That the reading and signing by the witness of the deposition transcript was not	
12	discussed within this transcript;	
13	That I am not a relative or employee of attorney or counsel, nor a relative or employee	
14	of such attorney or counsel for any of the parties hereto, nor interested directly or	
15	indirectly in the outcome of this action.	
16	IN WITNESS WHEREOF, I do hereunto set my hand this 8th day of November, 2021.	
17		
18		
19	Deborah Sabian	
20	DEBORAH HABIAN, CSR, RMR, CRR, CLR	
21	IL CSR NO. 084-02432 MO CCR NO. 1409	
22		
23		
24		
25		

### EXHIBIT CC

# EXCERPTS FROM THE DEPOSITION OF BRADLEY BUSS TAKEN SEPTEMBER 29, 2021

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Page 1
 1
               UNITED STATES DISTRICT COURT
 2
         FOR THE NORTHERN DISTRICT OF CALIFORNIA
                 SAN FRANCISCO DIVISION
 4
 5
     IN RE TESLA, INC.
 6
     SECURITIES LITIGATION,
                                 )Civil Action No.
 7
                                  )3:18-cv-04865-EMC
 8
 9
10
11
       VIDEOTAPED REMOTE DEPOSITION OF BRADLEY BUSS
                 * * * CONFIDENTIAL * * *
12
13
                     Park City, Utah
14
              Wednesday, September 29, 2021
15
16
17
18
19
    Reported by:
20
     Connie Recob, CCR, RMR, CRR
     Utah CCR No. 11133171-7801
21
22
     Washington CCR No. 2631
23
     Oregon CCR No. 15-0436
    JOB NO. 200186
24
25
```

Page 7 and a videographer, so your answers to my 1 2. questions today will be transcribed by the court reporter and also videotaped by the 3 4 choreo- -- or by the videographer. 5 Do you understand? 6 Α. I do. 7 And it's important to ensure a clear record that we try not to speak over one 8 9 another, so I just ask that even if you can 10 anticipate what my question is going to be, you'll allow me to complete my question before 11 you respond. 12 13 Do you understand? 14 Α. I do. 15 Are you represented by counsel Q. today? 16 17 Α. I am. 18 And who is your counsel? Q. Cooley. 19 Α. 20 Mr. Gibbs may object to one of my Q. If you'll allow him to get his 21 questions. objection on the record, then you can answer my 22 23 question unless Mr. Gibbs instructs you not to 24 do so. 25 Do you understand?

Page 68 1 At the point of the Tweet or Α. generically? Can you clarify? At the time -- sure. Sorry. At the 3 0. time of the Tweet. 4 Well, again, to our earlier 5 Α. discussions on that, I think the background 6 7 with the structure and the Saudi commitment, I think he was 100 percent sure that, you know, funding was not going to be an issue due to the 9 10 structure, due to investor interest and, you 11 know, having the Saudis as the backstop on 12 everything. 13 Did you have any understanding of 14 your own as to why Elon made this Tweet at this 15 time? Not at the time that it came out, 16 Α. but I think, you know, down the road, you know, 17 we got some more clarity. 18 19 And what was the clarity you got 0. 20 down the road? Well, I think part of it was the --21 Α. 22 the leaking, you know, of the Saudi investment. Obviously, if they were going to be the main 23

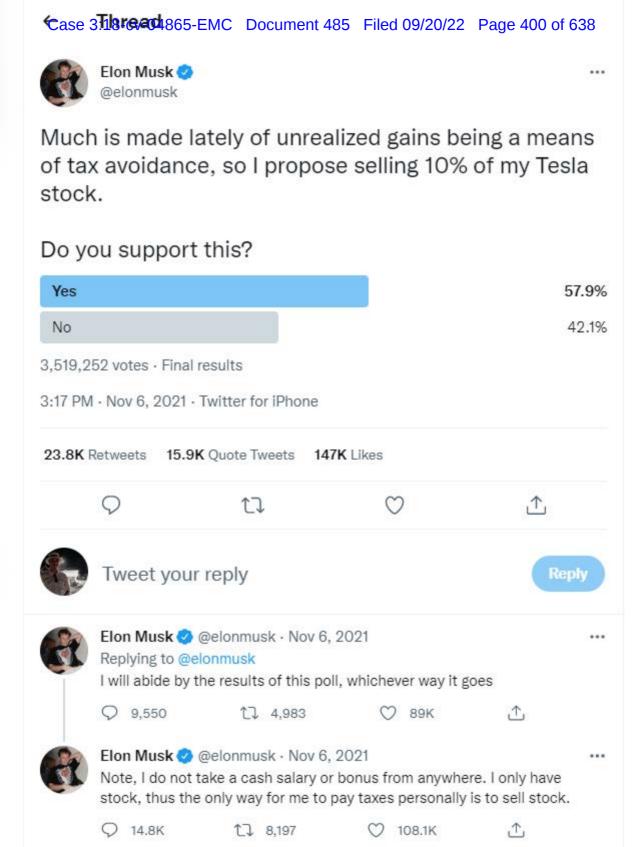
investor, okay, what is going to come next?

And then generically, just, you know, his

24

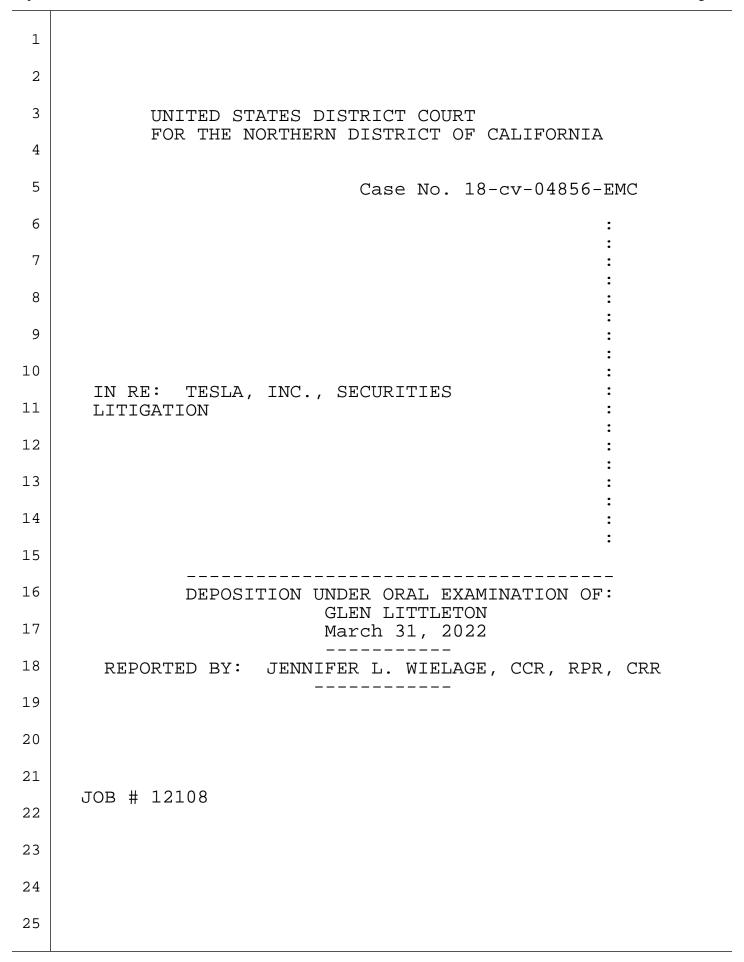
```
Page 151
 1
                   CERTIFICATE
 2
 3
     STATE OF WASHINGTON
 4
                           ) ss.:
 5
     COUNTY OF SNOHOMISH
 6
 7
                I, Connie Recob, CCR 2631, RMR, CRR,
          a Notary Public within and for the State of
 8
          Washington, do hereby certify:
 9
10
                That BRADLEY BUSS, the witness whose
          deposition is hereinbefore set forth, was
11
12
          duly sworn by me and that such deposition
13
          is a true record of the testimony given by
          such witness.
14
15
                I further certify that I am not
          related to any of the parties to this
16
          action by blood or marriage; and that I am
17
          in no way interested in the outcome of this
18
19
          matter.
20
                IN WITNESS WHEREOF, I have hereunto
21
          set my hand this 11th day of October, 2021.
22
                       Com a And
23
24
                     Connie Recob, CCR 2631, RMR, CRR
25
```

# EXHIBIT DD



# EXHIBIT EE

# EXCERPTS FROM THE DEPOSITION OF GLEN LITTLETON TAKEN MARCH 31, 2022



1 2 THE VIDEOGRAPHER: We are now on the 3 Today's date is March 31, 2022 and the time 4 is 10:40 a.m. Central time zone. This is the 5 recorded video deposition of Glen Littleton in the 6 Tesla, Inc., Securities Litigation, matter of In Re: 7 in the United States District Court, Northern 8 District of California, Case No. 18-CV-04865-EMC. 9 My name is David Ambrogi from Everest 10 Court Reporting and I am the video specialist. 11 court reporter today is Jennifer Wielage, also from 12 Everest Court Reporting. 13 All counsel appearing today will be 14 noted on the stenographic record. 15 Will the court reporter please swear 16 in the witness. 17 GLEN LITTLETON, 18 12115 Southeast West Road, Edgerton, Missouri, having 19 been first duly sworn, according to law, testifies as 20 follows: 21 EXAMINATION BY MR. PRICE: 22 Thank you. Good morning, Ο. 23 Mr. Littleton. Can you hear me? 24 Α. Yes, I can. 25 I represent Defendants Q. Oh, great.

A.

When was that?

1	Q. Yes.
2	A. I think it was December of '19, when
3	I opened up a Schwab account and traded small.
4	Q. Since then, how much capital have you
5	invested in Tesla?
6	A. How much have I invested? Gee,
7	gosh less than 500,000.
8	Q. And currently, what is your Tesla
9	portfolio worth?
10	A. I clearly have a position of about
11	4,000 shares on a delta basis. I think a liquidation
12	value is about a million and a half; very
13	approximate. I'm being very approximate here.
14	Q. Sure. Yeah.
15	And when you say that you
16	characterize your position, today do you actually own
17	stock?
18	A. A derivative portfolio.
19	Q. Okay.
20	A. On a delta basis, using the
21	mathematical formula of options, it's a little over
22	4,000 shares.
23	Q. Okay.
24	A. So that would be you know, that's,
25	what, 4,000 times options are different. So it's

probably between a million and a half and \$2 million.

- Q. When you got out of Tesla in 2018, was any of that as a result of your personal frustration with either the product or the service on those products?
- A. No. I -- we -- my wife and I have purchased eight Teslas, so, no, it was -- I was just weary of the battle of fighting the news, fighting the Tweets and the final blow for me came when Elon was on a podcast, and it was -- and it appeared he was smoking pot. I don't know that. I'm not accusing him of that, but it was portrayed that way. And that's when I said: You know what, I'm just done for a while. I just have to out -- get away from the stock. There's too much drama.
- Q. Well, is it fair to say that there's been drama since December 2019?
- A. There's been drama? Oh, yeah. It's part of the deal. And what I have tried to do is become just more detached from Elon's Tweets and things and become more emotionally agnostic about him and focus on what I see the technology providing.
- Q. At the time, by the end of 2018, when you got out of Tesla stock, did you personally feel that Elon Musk had intentionally lied concerning what

19

20

21

22

23

24

25

1	UNITED STATES DISTRICT COURT
2	FOR THE NORTHERN DISTRICT OF CALIFORNIA
3	I, Jennifer L. Wielage, CCR No. 30X100191600,
4	Certified Court Reporter, certify:
5	That the foregoing proceedings were taken
6	before me at the time and place therein set forth, at
7	which time the witness was put under oath by me;
8	That the testimony of the witness, the
9	questions propounded, and all objections and
10	statements made at the time of the examination were
11	recorded stenographically by me and were thereafter
12	transcribed;
13	That a review of the transcript by the
14	deponent was requested;
15	That the foregoing is a true and correct
16	transcript of my shorthand notes so taken.
17	I further certify that I am not a relative or

I further certify that I am not a relative or employee of any attorney of the parties, nor financially interested in the action.

I declare under penalty of perjury under the laws of California that the foregoing is true and correct.

Dated this 31st day of March 2021.

genniger L. Wilage

Jennifer L. Wielage, CCR, RPR, CRR

## EXHIBIT FF



## EXHIBIT GG

Littleton

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INITED STATES DISTRICT COURT RTHERN DISTRICT OF CALIFORNIA

Case No. 18-cv-04865-EMC

Hon. Edward M. Chen

CLASS ACTION

CONSOLIDATED COMPLAINT FOR SECURITIES LAWS

Demand for Jury Trial

following upon information and belief, except as to those allegations concerning Plaintiff, which are alleged upon personal knowledge. Plaintiff's information and belief is based upon, among other things, the investigation made by and through Plaintiff's attorneys, which includes without limitation: (a) review and analysis of regulatory filings made by Tesla, Inc. ("Tesla") with the United States Securities and Exchange Commission ("SEC"); (b) review and analysis of press

Lead Plaintiff Glen Littleton ("Plaintiff"), by and through undersigned counsel, allege the

and other papers filed in the civil proceedings brought by the SEC against Tesla and Defendant

releases and media reports issued and disseminated by Tesla; (c) review and analysis of pleadings

Elon R. Musk ("Musk") in the United States District Court for the Southern District of New York,

including the complaints filed and judgments entered therein; and (d) review of other publicly

28 available information concerning Tesla.

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# 3.

Plaintiff believes that substantial evidentiary support will exist for the allegations set forth herein after a reasonable opportunity for discovery.

#### I. NATURE OF THE CLAIM

- Plaintiff, on behalf of a class of shareholders who purchased or sold Tesla securities from August 7, 2018 to August 17, 2018 (the "Class Period") and were damaged thereby, brings this federal class action lawsuit against Defendants Tesla, Musk, and Tesla's Board of Directors (defined below). As alleged herein, Musk and Tesla violated Section 10(b) of the Securities Exchange Act of 1934, 15 U.S.C. §78j, and SEC Rule 10b-5, 17 C.F.R. 240.10b-5. Tesla's Board of Directors violated Section 20(a) of the Securities Exchange Act of 1934, 15 U.S.C. §78t. These violations caused Plaintiff and the class billions of dollars of damages for which Defendants should be held accountable.
- 2. Musk co-founded Tesla and, at all relevant times, served as the company's Chief Executive Officer and Chairman. On August 7, 2018, at 12:48 p.m. ET, Musk tweeted the following message to over 22 million people: "Am considering taking Tesla private at \$420. Funding secured." Musk continued to tweet and make statements about the potential transaction including tweeting about three hours later: "Investor support is confirmed. Only reason why this is not certain is that it's contingent on a shareholder vote." These statements and a later email published on August 13, 2018, created the impression to the public that it was virtually certain that Musk could take Tesla private at \$420 per share, that funding for this multi-billion dollar transaction had been secured, and the only remaining contingency was a shareholder vote.
- In fact, Musk had not even discussed, much less confirmed, key deal terms, including price, with any potential investor. There was no funding secured to take Tesla private at \$420 per share or any other price. Musk had discussed taking Tesla private with Saudi Arabia's sovereign wealth fund (named the "Public Investment Fund"), but those discussions were extremely preliminary. They consisted of only exploring how the fund could be involved and did not result in any firm decision on whether the fund would increase its existing 5% stake in Tesla.
- 4. The statements were also false because Musk himself understood there was "a lot of uncertainty" surrounding the proposal and there were many contingencies that needed to be satisfied

before any transaction could be approved by Tesla stockholders. Musk had not reached any agreement as to the price per share, had not determined how the going-private transaction would be structured, had not determined whether and to what extent current shareholders would be in favor of the transaction or if Tesla's Board of Directors would even be in favor of having a shareholder vote, had not formally retained any advisors, and had not determined whether any regulatory approvals would need to be obtained for the transaction. Musk had also not reached any agreement concerning a significant contingency raised by the Public Investment Fund—building a Tesla production facility in the Middle East.

- 5. Musk knew of the uncertain and contingent nature of any going-private transaction for Tesla as well as the lack of any secured funding at \$420 per share or at any other price. Yet Musk published his tweets and other statements anyway, disrupting the markets in Tesla securities such as stock and stock options, and causing billions of dollars of damage to Tesla investors. Indeed, Musk has since admitted in the fraud case brought against him by the SEC that his statements about the going-private transaction "were premised on a long series of baseless assumptions and were contrary to facts that [he] knew."
- 6. On August 17, 2018, *The New York Times* published an article based on a lengthy interview with Musk that reported that the Public Investment Fund had not committed to provide any cash, so funding was not "secured." *The New York Times* article further disclosed that no one had seen or reviewed Musk's August 7, 2018 tweet before he posted it indicating that no going-private transaction was imminent. That day, Tesla's shares declined by almost 9%, erasing over \$5 billion of Tesla's market capitalization. For investors that initially believed Musk's statements and purchased shares at artificially inflated prices in hopes that Tesla would ultimately pay \$420 per share, they sustained millions of dollars in losses.
- 7. Investors who were "short" Tesla stock (meaning that they were betting the stock price would decline) were also damaged. Tesla had over 170 million shares outstanding at or around August 7, 2018. The "short interest" at that point in time was 33.8 million, meaning that almost 20% of Tesla's shareholders were betting that Tesla's stock would decline in value. Musk's tweet, which caused the price of Tesla's shares to increase 11% over the course of the day, resulted in a

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mark-to-market loss of \$1.1 billion for these short investors, many of whom had to purchase Tesla shares at inflated prices to cover their positions.

- 8. Option traders also suffered significant losses. Purchasers and sellers of call and put contracts, which are agreements that provide investors with either the right or the obligation to buy or sell shares at specific prices within particular periods of time, opened and closed positions at artificial prices due to the artificial inflation in Tesla's stock price and the increased implied volatility in Tesla's stock, resulting in damages to those investors.
- 9. By misleading investors regarding the proposed going-private transaction and its funding, Musk, either intentionally or with deliberate recklessness, harmed virtually every single other person and/or entity trading Tesla securities during the Class Period.
- 10. Members of Tesla's Board of Directors also bear responsibility for the losses suffered by Tesla investors as a result of Musk and Tesla's misrepresentations. The Board of Directors had responsibility for ensuring Tesla's public disclosures were truthful and accurate. In November 2013, Tesla identified Musk's Twitter account as an official channel of communication for the company. Once that occurred, Tesla's Board of Directors were duty-bound to oversee the accuracy of statements made by Musk on his Twitter account. While Tesla's board members issued press releases regarding the proposed going-private transaction and managed to persuade Musk from tweeting about the transaction for some of the Class Period, they did not use this control to ensure that the disinformation published by Musk was corrected until after the Class had already suffered billions of dollars in losses.

#### II. **JURISDICTION AND VENUE**

- 11. The claims asserted herein arise under and pursuant to: Sections 10(b) of the Securities Exchange Act of 1934, 15 U.S.C. §78j, and SEC Rule 10b-5 promulgated thereunder by the SEC (17 C.F.R. §240.10b-5); and Section 20(a) of the Securities Exchange Act of 1934, 15 U.S.C. §78t.
- 12. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §1331 and Section 27 of the Securities Exchange Act of 1934, 15 U.S.C. §78aa.

- 13. Venue is proper in this District pursuant to Section 27 of the Securities Exchange Act of 1934, 15 U.S.C. §78aa and 28 U.S.C. §1391(b) because certain of the acts alleged herein, including the preparation and dissemination of material false and/or misleading information, occurred in this District. Further, Tesla's principal executive offices are located within this District.
- 14. In connection with the acts, conduct and other wrongs alleged in this Complaint, Defendants, directly and/or indirectly, used the means and instrumentalities of interstate commerce, including but not limited to, the United States mail, interstate telephone communications and the facilities of the national securities exchange.

#### III. PARTIES

- 15. Lead Plaintiff Glen Littleton purchased and sold Tesla common stock and options during the Class Period and was damaged thereby. Littleton's certification evidencing his transactions in Tesla's securities during the Class Period, previously filed with the Court in connection with his motion for appointment as lead plaintiff, is incorporated herein by reference (ECF No. 42-1).
- 16. Defendant Tesla is a Delaware corporation with its principal executive offices located at 3500 Deer Creek Road, Palo Alto, California 94304. Tesla designs, develops, manufactures, and sells electric vehicles and energy generation and storage systems. The company's stock is listed on the NASDAQ Global Select market ("NASDAQ") under the ticker symbol "TSLA." Other Tesla securities include stock options which are traded and quoted on exchanges including: BOX Exchange LLC; Cboe BZX Options Exchange, Inc; Cboe C2 Options Exchange, Incorporated; Cboe EDGX Options Exchange, Inc.; Cboe Options Exchange, Incorporated; Miami International Securities Exchange, LLC; MIAX PEARL, LLC; Nasdaq BX, Inc.; Nasdaq GEMX, LLC; Nasdaq ISE, LLC; Nasdaq PHLX LLC; The Nasdaq Stock Market LLC; NYSE American LLC; and NYSE Arca, Inc.
- 17. Defendant Musk co-founded Tesla in July 2003. In early February 2004, Musk became Tesla's majority shareholder and joined the Board of Directors as its Chairman. By October 2008, Musk became both the Chief Executive Officer and spokesman of Tesla and has served in

that capacity since 2008. Musk was forced to step down as Chairman of Tesla's Board in October 2018 in accordance with his settlement with the SEC concerning the statements at issue herein.

- 18. Musk created a profile on the social media platform Twitter under the handle "@elonmusk" (twitter.com/elonmusk) in June 2009. Since that time, Musk often used Twitter to communicate about Tesla's business.
- 19. In November 2013, Tesla formally notified investors that it would use Musk's Twitter account as a formal means of communication to convey "additional information" about the company to investors. In a current report on Form 8-K dated November 5, 2013, Tesla stated, in pertinent part, as follows: "Tesla investors and others should note that we announce material information to the public about our company, products and services and other issues through a variety of means, including Tesla's website, press releases, SEC filings, blogs and social media, in order to achieve broad, non-exclusionary distribution of information to the public.... For additional information, please follow Elon Musk's and Tesla's Twitter accounts: twitter.com/elonmusk and twitter.com/TeslaMotors."
- 20. Defendant Brad W. Buss ("Buss") has served as a director of Tesla's Board since 2009. As a member of the Board, Buss acted as a controlling person of Tesla.
- 21. Defendant Robyn Denholm ("Denholm") has served as a director of Tesla's Board since 2014 and was appointed to chair the Board on November 7, 2018. As a member of the Board, Denholm acted as a controlling person of Tesla.
- 22. Defendant Ira Ehrenpreis ("Ehrenpreis") has served as a director of Tesla's Board since 2007. As a member of the Board, Ehrenpreis acted as a controlling person of Tesla.
- 23. Defendant Antonio J. Gracias ("Gracias") has served as a director of Tesla's Board since 2007 and has served as Tesla's Lead Independent Director since 2010. As a member of the Board, Gracias acted as a controlling person of Tesla.
- 24. Defendant James Murdoch ("Murdoch") has served as a director of Tesla's Board since 2017. As a member of the Board, Murdoch acted as a controlling person of Tesla.
- 25. Defendant Kimbal Musk has served as a director of Tesla's Board since 2004. As a member of the Board, Kimbal Musk acted as a controlling person of Tesla.

- 26. Defendant Linda Johnson Rice ("Rice") has served as a director of Tesla's Board since 2017. As a member of the Board, Rice acted as a controlling person of Tesla.
- 27. Defendants Buss, Denholm, Ehrenpreis, Gracias, Murdoch, Kimbal, and Rice are collectively referred to as the "Board."

#### IV. CLASS ACTION ALLEGATIONS

- 28. Plaintiff brings this action on behalf of all individuals and entities who purchased or sold Tesla stock, options, and other securities during the Class Period and were damaged thereby, excluding Tesla, Musk, the Board, and each Defendant's immediate family members, legal representatives, heirs, successors or assigns, and any entity in which Tesla, Musk, or the Board have or had a controlling interest (the "Class").
- 29. The Class members are so numerous that joinder of all members is impracticable. Throughout the Class Period, Tesla's securities were actively traded on the NASDAQ. While the exact number of Class members is unknown to Plaintiff at this time and can be ascertained only through appropriate discovery, Plaintiff believes that there are thousands if not hundreds of thousands of Class members. Record owners and other Class members may be identified from records maintained by Tesla or its transfer agent and may be notified of the pendency of this action by mail, using the form of notice similar to that customarily used in securities class actions.
- 30. At all relevant times herein, there were over 170 million shares of Tesla's common stock outstanding and hundreds of millions of dollars of other securities traded. Upon information and belief, these shares and option contracts were held by thousands of individuals located geographically throughout the country and the world. Joinder would be highly impracticable.
- 31. Plaintiff's claims are typical of the claims of the Class members as all Class members were similarly affected by the Defendants' wrongful conduct in violation of the federal securities laws complained of herein. Plaintiff bought and sold common stock and option contracts during the Class Period. The manner in which Plaintiff sustained damages in connection with each security that he held was similar, if not identical, to other Class members who purchased or sold Tesla securities.
  - 32. Plaintiff has and will continue to fairly and adequately protect the interests of the

Class members.

- 33. Plaintiff has retained counsel competent and experienced in class and securities litigation.
  - 34. Plaintiff has no interests antagonistic to or in conflict with those of the Class.
- 35. Common questions of law and fact exist as to all Class members and predominate over any questions solely affecting individual Class members. Among the questions of law and fact common to the Class are:
  - (a) whether the federal securities laws were violated by Defendants' respective acts as alleged herein;
  - (b) whether Defendants acted knowingly or with deliberate recklessness in issuing false and misleading statements concerning a proposed going-private transaction and its financing;
  - (c) whether the price of Tesla's securities during the Class Period were affected by Defendants' conduct complained of herein; and
  - (d) whether the Class members have sustained damages and, if so, what is the proper measure of damages.
- 36. A class action is superior to all other available methods for the fair and efficient adjudication of this controversy since joinder of all members is impracticable. Furthermore, as the damages suffered by individual Class members may be relatively small, the expense and burden of individual litigation make it impossible for Class members to individually redress the wrongs done to them.
  - 37. There will be no difficulty in the management of this action as a class action.

#### V. <u>BACKGROUND ALLEGATIONS</u>

38. Tesla designs, develops, manufactures, and sells electric vehicles. These vehicles consist primarily of three models: the Model S luxury sedan, the Model X sport utility vehicle, and the Model 3 mass market sedan.

- 39. Both the Model S and Model X had experienced production difficulties after being introduced in 2012 and 2015, respectively. As the Model 3 vehicle was to be produced in greater numbers, analysts and investors closely followed Tesla's production plans for it.
- 40. On October 2, 2017, Tesla issued a press release stating that "Model 3 production was less than anticipated due to production bottlenecks." Despite promising to deliver 1,600 Model 3 vehicles in the third quarter of fiscal 2017, it had produced only 220 of the vehicles. Musk had previously promised on February 22, 2017 that Tesla would be producing 5,000 Model 3 vehicles per week by the end of 2017.
- 41. On November 1, 2017, in an "Update Letter" posted to its website, Tesla revealed that its manufacturing problems during the third quarter of fiscal 2017 had resulted in heavy spending in an effort to increase production. The spending resulted in wider-than-expected losses—\$2.92 per share compared to the analyst consensus of \$2.29 per share—and a sharp decline in the price of Tesla's common stock from \$331.53 per share to \$321.08 per share.
- 42. Notwithstanding its production problems, Tesla told shareholders in the November 1, 2017 "Update Letter" that it expected to achieve a production rate of 5,000 Model 3 vehicles per week late in the first quarter of 2018.
- 43. On January 3, 2018, the *Los Angeles Times* reported that Tesla's problems with battery production at its "Gigafactory" in Sparks, Nevada (where Tesla produces lithium-ion batteries and electric vehicles), were worse than it had acknowledged and likely to cause further delays and quality issues for the new Model 3 vehicles. The continued production problems led Tesla to revise its previously stated production targets in a press release dated January 3, 2018. From 5,000 Model 3 vehicles per week by the end of the first quarter of 2018, Tesla told investors that it was aiming for 2,500 Model 3 vehicles per week by the end of March, ramping up to 5,000 Model 3 vehicles per week by June.
- 44. On January 25, 2018, investors received additional information about Tesla's Model 3 production problems when CNBC reported that Tesla's Model 3 vehicle production was being hampered in part due to the fact that the company was still making its Model 3 vehicle batteries

partly by hand and having to "borrow" scores of employees from Panasonic, which is a partner in the Gigafactory and supplies lithium-ion battery cells, to help with this manual assembly.

- 45. Numerous short investors had targeted Tesla by this point in time. For example, CNBC reported in its January 25, 2018 article that Stanphyl Capital's Mark B. Spiegel had taken a "significant short position in the company." Spiegel told CNBC, in pertinent part, that: "While I've no doubt that Tesla will eventually work out its Model 3 vehicle production problems, the base model will cost Tesla at least mid-\$40,000s to build. The company will never deliver more than a token few for less than the current \$49,000 lowest-cost offering. Sales will hugely disappoint relative to expectations of over 400,000 a year. And even at those higher prices Tesla will never come anywhere close to its promised [profitability]."
- 46. As of January 31, 2018, the short interest in Tesla stock was approximately 30 million shares, or about 18% of Tesla's outstanding shares.
- 47. On April 3, 2018, Tesla revealed in a press release that instead of producing 2,500 Model 3 vehicles per week, it was only producing just over 2,000. According to the *Wall Street Journal* in an article published on April 3, 2018, Musk had developed a reputation for setting "ambitious deadlines that he fail[ed] to meet on time."
- 48. As of April 3, 2018, Tesla's short interest had grown to almost 32 million shares, or 19% of the company's outstanding shares.
- 49. On April 11, 2018, according to an article published by CNBC titled *Tesla is the biggest short in the US stock market*, the dollar amount of shares shorted on Tesla was \$10.7 billion, or more than 25% of Tesla's available stock. Big banks, such as Goldman Sachs, were encouraging its clients to sell their Tesla stock on the premise that the company would not be able to meet its Model 3 vehicle production targets.
- 50. Musk publicly displayed his animosity towards short sellers of Tesla stock. On May 2, 2018, while participating in a conference call to discuss Tesla's earnings for the first quarter of 2018, Musk abruptly dismissed questions from analysts. In response to a question from Sanford Bernstein senior analyst Toni Sacconaghi about Tesla's capital requirements, Musk responded by saying "Boring, bonehead questions are not cool, Next?" In response to a question from RBC

Capital Markets Joseph Spak about Model 3 vehicle reservations, Musk said, "These questions are so dry. They're killing me."

- 51. On May 4, 2018, Musk defended his hostile behavior towards Sacconaghi and Spak, tweeting that they were just "two sell-side analysts who were trying to justify their Tesla short thesis."
- 52. Later on May 4, 2018, Musk tweeted "Oh and uh short burn of the century comin soon. Flamethrowers should arrive just in time." Shortly afterwards on May 4, 2018, Musk stated, "Looks like sooner than expected. The sheer magnitude of short carnage will be unreal. If you're short, I suggest tiptoeing quietly to the exit . . . ."
- 53. On May 7, 2018, Musk bought about \$9.85 million worth of Tesla shares in the premarket in a manner designed have the greatest impact on Tesla's stock price and force a burst of short-covering. On May 7, 2018, Tesla's stock price increased from \$297.50 to \$302.77.
- 54. Musk did this again on June 12, 2018 when he bought about \$24.9 million worth of Tesla stock to maintain Tesla's stock price despite announcing that Tesla was cutting 46,000 employees, about 9% of its workforce.
- 55. On June 17, 2018, Musk tweeted that "[the shorts] have about three weeks before their short position explodes."
- 56. On July 2, 2018 and July 3, 2018, *The New York Times* and *Bloomberg* reported that Tesla finally met its production target of 5,000 Model 3 vehicles per week during the last seven days of June 2018.
- 57. Despite Tesla's increased Model 3 vehicle production figures, its stock price fell from \$342.95 on June 29, 2018 to \$310.86 on July 3, 2018. Tesla's short interest, however, also fell by 11% from 39 million shares to 34.6 million shares.
- 58. On July 22, 2018, the *Wall Street Journal* published a story focused on Tesla's request to suppliers to refund a portion of its past payments. According to this report, Tesla requested its suppliers to refund "a meaningful amount of its payments since 2016" to allow it to continue its operations and continue "the long-term growth between" Tesla and its suppliers.

Tesla's requests for refunds from its suppliers raised further questions about its cash position, which had dwindled due to Model 3 vehicle production issues.

- 59. Following the July 22, 2018 *Wall Street Journal* article, Tesla's stock price declined from \$313.58 per share to \$303.20 per share.
- 60. On July 24, 2018, in response to a growing short interest following the *Wall Street Journal* article, Musk contacted the employer of an author of an article published on *SeekingAlpha* and threatened to sue or complain publicly about the articles. The author, who managed a private family investment portfolio of approximately \$1 billion, had published four articles titled "Just Say 'No' To Tesla's Misleading Margin Metric," "As Tesla Breaks Faith With Its Believers, It's Time To Go Short," "Even With Model 3 Success, Tesla Is Structurally Bankrupt," and "Tesla Investors Swallow The Blue Pill." Musk threatened that if the author continued to write, he would engage counsel and sue. As a result of Musk's threats, the author immediately stopped writing at *SeekingAlpha* and deactivated his Twitter account.
- 61. On July 30, 2018, U.S. News & World Report reported that Steve Eisman, the investor who famously predicted the collapse of the U.S. housing market in 2007 and 2008 and was featured in Michael Lewis's book *The Big Short*, was predicting a similar demise for Tesla. In an interview with Bloomberg, Eisman expressed the opinion that Musk had a hard time executing, despite being a "very, very smart man."
- 62. By July 31, 2018, Tesla's short interest was back to 35 million shares, or 20% of the company's outstanding stock.
- 63. On July 31, 2018, Musk and Sam Teller, who was employed by Tesla as Director, Office of the CEO, attended a meeting with representatives of the Public Investment Fund at the "Tesla Factory" in Freemont, California, for approximately 30 to 45 minutes. Deepak Ahuja, Tesla's Chief Financial Officer, joined the meeting about halfway through. On several occasions since January 2017, the Public Investment Fund had expressed interest in exploring with Musk a going-private transaction involving Tesla, but no proposed transaction had resulted from those discussions. During the July 31, 2018 meeting, a representative of the Public Investment Fund

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27 28 mentioned that the fund would still be interested in exploring a going-private transaction if Tesla was prepared to build a production facility in the Middle East.

- 64. No additional details or terms were discussed, including fundamental terms such as: the dollar amount to be invested; the ownership percentage for the fund if Tesla was to go private; any acquisition premium to be offered to current Tesla shareholders; any potential restrictions on foreign ownership of a significant stake in Tesla; the fund's available liquid capital to contribute to a going-private transaction; whether the fund was experienced in going-private transactions; regulatory obstacles associated with a going-private transaction; or what, if any, approval from Tesla's Board was needed to take Tesla private.
- 65. When the July 31, 2018 meeting concluded, no legal documents had been signed, no term sheets had been executed, no advisors had been engaged, and no decision had been made with regard to the Middle East production facility.
- 66. On August 1, 2018, Tesla reported its financial results for the second quarter of 2018 in an investor "Update Letter" and during an investor conference call. Tesla's results exceeded analyst revenue expectations.
- 67. In the "Update Letter" published on August 1, 2018, Tesla also affirmed production targets of 6,000 Model 3 vehicles per week by the end of August.
- 68. Tesla's quarterly results led to a 16% surge in the company's stock price from \$300.84 to \$349.54.
- 69. On August 2, 2018, after the market closed, Musk sent an email to Tesla's Board, Chief Financial Officer, and General Counsel. The subject line of the email stated "Offer to Take Tesla Private at \$420." In the email, Musk explained that he wanted to take Tesla private in order to, among other reasons, avoid the "constant defamatory attacks by the short-selling community" against Tesla. Musk also asked that the "matter be put to a shareholder vote at the earliest opportunity" and advised that the "offer expires in 30 days." At this point in time, Musk thought there was "a lot of uncertainty" regarding a potential going-private transaction and believed that the likelihood of consummating a transaction was about 50%.

- 70. According to Musk, the \$420 per-share price for the going-private transaction was based on a 20% premium to the closing price of Tesla's stock on August 2, 2018, which was \$349.54 per share. Musk believed that 20% was a "standard premium" in going-private transactions. Although the precise calculation equaled \$419.49, Musk rounded the price up to \$420 per share because he thought his girlfriend at the time, Claire Elise Boucher (also known as "Grimes"), would find it funny due to the significance of the number to marijuana users.
- Since Musk's meeting with the Public Investment Fund on July 31, 2018, Tesla's stock price had increased over 17% due to the positive earnings results announced by the company on August 1, 2018. If Musk were to have applied the 20% premium to Tesla's stock price as of July 31, 2018 (closing price of \$298.14 per share), the per-share price for the going-private transaction would have been approximately \$358 per share. Accordingly, if the going-private transaction occurred at \$420 per share, investors in the transaction would be paying a "premium on a spike," which Musk realized could make the going-private transaction not feasible. Notwithstanding, Musk did not discuss the \$420 per-share price with the Public Investment Fund or any other funding source for a going-private transaction prior to sending his email to Tesla's Board on August 2, 2018.
- 72. On August 3, 2018, in response to Musk's email, the Board held a telephonic meeting at which time Musk informed the board that the Public Investment Fund was interested in funding a going-private transaction and that the fund was interested in having Tesla build a production facility in the Middle East. Concerning building a production facility in the Middle East, at least one Tesla Board member described such a condition as a "non-starter." Musk also told the Board that he wanted Tesla's existing investors to stay with the company. At least one Board member told Musk that it would be "really difficult for small investors" to remain shareholders if Tesla went private. Musk also asked the Board for permission to contact existing shareholders to assess their interest in participating in a going-private transaction. The Board authorized Musk to contact certain investors and report back.
- 73. On August 6, 2018, Musk discussed the going-private transaction with a private equity fund partner with experience in going-private transactions. During the call, Musk stated that the number of shareholders in a private Tesla would need to be below 300, yet at the time there

were over 800 institutional investors in Tesla. The private equity fund partner told Musk that the structure he was contemplating for the private company was "unprecedented" in his experience.

- 74. On August 7, 2018, while driving to the airport, Musk posted the following tweet at 12:48 p.m. ET: "Am considering taking Tesla private at \$420. Funding secured."
- 75. At 1:00 p.m. ET, Martin Viecha, Tesla's Senior Director of Investor Relations, sent a text message to Musk asking, "Was this text legit?"
- 76. At 1:13 p.m. ET, a Tesla investor texted Teller asking, "What's Elon's tweet about? Can't make any sense of it. Would be incredibly disappointing for shareholders that have stuck it out for so long." Several minutes later, a reporter also texted Teller saying, "Quite a tweet! (Is it a joke?)."
- 77. At 1:15 p.m. ET, Musk responded to another Twitter user's question, "At what price?" by repeating "420."
- 78. At 1:40 p.m. ET, Musk tweeted, "I don't have a controlling vote now & wouldn't expect any shareholder to have one if we go private. I won't be selling in either scenario."
- 79. At 2:00 p.m. ET, Musk tweeted, "My hope is \*all\* current investors remain with Tesla even if we're private. Would create special purpose fund enabling anyone to stay with Tesla. Already do this with Fidelity's SpaceX [a privately held company for which Musk serves as CEO] investment." In response to this tweet another Twitter user asked, "Could we still invest once private?" Musk responded, "Yes, but liquidity events would be limited to every 6 months or so (like SpaceX)."
- 80. At 2:07 p.m. ET, Musk responded to a Twitter user who wrote, "Or if you do take Tesla private, please have a provision for retail investors who have held Tesla shares prior to Dec 31, 2016 that those shares will be converted into private shares in the new private company. . . ." by tweeting, "Absolutely. Am super appreciative of Tesla shareholders. Will ensure their prosperity in any scenario."
- 81. At 2:08 p.m. ET, NASDAQ halted trading in Tesla stock due to the increased volatility. Trading remained halted for just over one and a half hours until 3:45 p.m. ET.

- 82. At 2:13 p.m. ET, Musk tweeted, "Shareholders could either to [sic] at 420 or hold shares & go private."
- 83. At 2:23 p.m. ET, a reporter emailed Musk with the subject line reading: "Are you just messing around?" In the email, the reporter said, "Reaching out to see what's going on with your tweets about taking the company private? Is this just a 420 joke gone awry? Are you serious? It seems like you are dancing into some pretty tricky legal territory by messing about with the markets this way. Is there an actual explanation coming?" At 3:07 p.m. ET, Musk responded to a Twitter user's comment about a "forced buyout" by tweeting, "Def. no forced sales. Hope all shareholders remain. Will be way smoother & less disruptive as a private company. Ends negative propaganda from shorts."
- 84. At 3:16 p.m. ET, Musk sent an email to Tesla employees. The content of that email, entitled "Taking Tesla Private," was published to a publicly available Tesla blog at 3:32 p.m. ET. In the email and blog post, Musk explained his reasons for wanting to take Tesla private, including asserting that TSLA was "the most shorted stock in the history of the stock market" and stating that "being public means there are large numbers of people who have incentive to attack the company." The complete email and blog post follows:

#### Taking Tesla Private

August 7, 2018

The following email was sent to Tesla employees today:

Earlier today, I announced that I'm considering taking Tesla private at a price of \$420/share. I wanted to let you know my rationale for this, and why I think this is the best path forward.

First, a final decision has not yet been made, but the reason for doing this is all about creating the environment for Tesla to operate best. As a public company, we are subject to wild swings in our stock price that can be a major distraction for everyone working at Tesla, all of whom are shareholders. Being public also subjects us to the quarterly earnings cycle that puts enormous pressure on Tesla to make decisions that may be right for a given quarter, but not necessarily right for the long-term. Finally, as the most shorted stock in the history of the stock market, being public means that there are large numbers of people who have the incentive to attack the company.

I fundamentally believe that we are at our best when everyone is focused on executing, when we can remain focused on our long-term mission, and when there are not perverse incentives for people to try to harm what we're all trying to achieve.

This is especially true for a company like Tesla that has a long-term, forward-looking mission. SpaceX is a perfect example: it is far more operationally efficient, and that is largely due to the fact that it is privately held. This is not to say that it will make sense for Tesla to be private over the long-term. In the future, once Tesla enters a phase of slower, more predictable growth, it will likely make sense to return to the public markets.

Here's what I envision being private would mean for all shareholders, including all of our employees.

First, I would like to structure this so that all shareholders have a choice. Either they can stay investors in a private Tesla or they can be bought out at \$420 per share, which is a 20% premium over the stock price following our Q2 earnings call (which had already increased by 16%). My hope is for all shareholders to remain, but if they prefer to be bought out, then this would enable that to happen at a nice premium.

Second, my intention is for all Tesla employees to remain shareholders of the company, just as is the case at SpaceX. If we were to go private, employees would still be able to periodically sell their shares and exercise their options. This would enable you to still share in the growing value of the company that you have all worked so hard to build over time.

Third, the intention is not to merge SpaceX and Tesla. They would continue to have separate ownership and governance structures. However, the structure envisioned for Tesla is similar in many ways to the SpaceX structure: external shareholders and employee shareholders have an opportunity to sell or buy approximately every six months.

Finally, this has nothing to do with accumulating control for myself. I own about 20% of the company now, and I don't envision that being substantially different after any deal is completed.

Basically, I'm trying to accomplish an outcome where Tesla can operate at its best, free from as much distraction and short-term thinking as possible, and where there is as little change for all of our investors, including all of our employees, as possible.

This proposal to go private would ultimately be finalized through a vote of our shareholders. If the process ends the way I expect it will, a private Tesla would

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27 28 ultimately be an enormous opportunity for all of us. Either way, the future is very bright and we'll keep fighting to achieve our mission.

Thanks, Elon

- At 3:36 p.m. ET, Musk tweeted: "Investor support is confirmed. Only reason why 85. this is not certain is that it's contingent on a shareholder vote."
- 86. At the close of trading on August 7, 2018, Tesla's stock closed at \$379.59, an increase of 10% from its opening price of \$343.84.
- 87. At 5:09 p.m. ET, a research analyst emailed Viecha asking, "In the tweet, [Musk] said financing is secured but in the letter he doesn't address this. Can you clarify?" Viecha responded approximately ten minutes later stating, "I can only say that the first Tweet clearly stated that 'financing is secured'. Yes, there is a firm offer."
- 88. At 5:23 p.m. ET, another research analyst emailed Viecha and another investor relations team member asking, "Had some questions/clarifications on today's news and blog post. Can either of you speak?" Viecha responded a few minutes later stating, "[A]part from what has been tweeted and what was written in a blog post, we can't add anything else. I only want to stress that Elon's first tweet, which mentioned 'financing secured' is correct."
- 89. At 7:20 p.m. ET, Viecha received another email from yet another research analyst. Viecha responded by asking if the analyst had read Tesla's "official blog post on this topic." The analyst said, "I did. Nothing on funding though?" Viecha replied, "The very first tweet simply mentioned 'Funding secured' which means there is a firm offer. Elon did not disclose details of who the buyer is." The analyst replied, "Firm offer means there is a commitment letter or is this a verbal agreement?" Viecha responded, "I actually don't know, but I would assume that given we went full-on public with this, the offer is as firm as it gets."
- 90. Investors and analysts relied on and reacted to the August 7, 2018 representations. For example, RBC Capital Markets posted an analyst report on August 7, 2018 reporting Musk's tweets. RBC stated in pertinent part:

Tesla going private? Earlier today, CEO Elon Musk started tweeting about "considering taking Tesla private at \$420/share. Funding secured." This was later followed up with a letter to employees detailing the rationale. The structure would apparently be to create a special purpose fund enabling current shareholders to remain shareholders or cash out at \$420. This would be subject to a shareholder vote. While we are not assessing probability today, we believe there is substance to the news and note that prior "controversial" shareholder votes (like Solar City) have always voted with Elon.

. . .

**New outside equity?** Elon's tone and messaging regarding a potential transaction lead us to believe that there could be significant outside funding lined up. Learning who this is will be important (and relevant for shareholders deciding whether they should stay involved should the deal consummate). We note an unconfirmed FT article from today indicates that Saudi Arabia's sovereign fund took a 3-5% stake on the public markets, it was also noted they approached Tesla about new shares. In our view, sovereign funds (broadly), cash rich tech companies, Chinese sources and large VCs could all be potential candidates to provide funding.

91. Morningstar Equity Research was similarly positive about Musk's statements. Morningstar published an analyst note on August 7, 2018, titled "Musk Tweets Tesla May Go Private at \$420 a Share but Stockholders May Not Have to Sell at That Price." Morningstar's report stated:

Tesla CEO Elon Musk tweeted around midday on Aug. 7 the following: "Am considering taking Tesla private at \$420. Funding Secured." A buyout price of \$420 per share would be for about \$71.6 billion based on the July 27 outstanding share count of 170.6 million in the latest 10-Q filing, though it's unclear if Musk's roughly 22% ownership stake would be part of the deal or just converted into equity of a new private company. If a deal is announced and we think its execution is more likely than not, we will raise our fair value estimate to the deal price, but for now we are leaving our fair value estimate of \$179 in place.

We find it odd that Musk would disclose that he is considering doing a deal and specifying a price rather than not saying anything until Tesla actually announces it is going private. It is possible that he wants to hurt short sellers of Tesla now. He has been very vocal against them recently, including posting a satire video on Twitter on Aug. 5. We think it is also possible that he wants to get a price higher than \$420, else we would expect him to simply announce he is considering going private with funding secured and leave the \$420 number out of the tweet. We speculate that the funding comes mostly from tech investors, such as possibly SoftBank or Tencent (the latter bought 5% of Tesla in 2017), sovereign wealth funds, and wealthy Silicon Valley investors.

We understand why Musk would want to go private. Rolling Stone in November quoted him saying, "I wish we could be private with Tesla. It actually makes us less

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efficient to be a public company." Tesla is still in its early stages of growth, and we think Musk would prefer to grow the company without having to check in with Wall Street every quarter. He probably instead wants investors who are there for the long run. An Aug. 7 Musk tweet said he would create a special-purpose fund allowing any Tesla investor to remain an owner or to sell at \$420.

- 92. The reports from RBC Capital Markets and Morningstar Equity Research validated the market's reliance on Musk's tweet. While Musk had previously expressed interest in taking Tesla private, never before had he publicly stated that funding had been secured or that the transaction was certain with the only contingency being the outcome of a shareholder vote.
- 93. On August 8, 2018, before the market opened, Tesla issued a short press release relating to Musk's statements from the previous day. The statement, which was disseminated on Globe Newswire and posted to Tesla's website, stated:

Statement from the following members of Tesla's Board of Directors: Brad Buss, Robyn Denholm, Ira Ehrenpreis, Antonio Gracias, Linda Johnson Rice, and James Murdoch

PALO ALTO, Calif., Aug. 08, 2018 (GLOBE NEWSWIRE) -- Last week, Elon opened a discussion with the board about taking the company private. This included discussion as to how being private could better serve Tesla's long-term interests, and also addressed the funding for this to occur. The board has met several times over the last week and is taking the appropriate next steps to evaluate this.

- 94. At close of trading on August 8, 2018, Tesla's stock price closed at \$370.34 per share, a decline of 2.5% from its prior close of \$379.59 on August 7, 2018.
- 95. On August 8, 2018, Jeffries published a research report relating to Musk's tweets titled, "Tesla, Inc. (TSLA) Doing the 'Right Stuff', but Who Might be Tesla's Next Large Shareholder?" Jeffries stated in pertinent part:

#### **Key Takeaway**

In a nod to the Space X structure, Elon Musk suggested taking Tesla private. Distraction or not, the move feels right even if Musk is downplaying how supportive public markets have been. With Tesla unable to take on more debt, we wonder who may fund the potential deal and end up as a new large shareholder. We raise estimates to reflect a better outlook post Q2. Our DCF fair value points to \$300 and our new \$360 PT bridges the gap to the \$420 potential bid.

Going private feels like the right thing to do - True to his unconventional and questionable communication style, Elon Musk tweeted "Considering taking Tesla

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27 28 private at \$420. Funding secured". No further details or confirmation. The rationale for being private is well known (see email to employees on website). There is no intention to merge with SpaceX. \$420/share would value Tesla at \$71bn, 2.3x 2019E revenue. Subject to a shareholder vote and to conditions offered in terms of liquidity, exit and potential remuneration the overall cash cost could be more modest considering c.20% insiders and c.30% long term holders. As Tesla can hardly take on more debt, providers of funds could become new large shareholders. Also, despite repeated complaints, Tesla has hugely benefited from supportive public markets and from abnormally low cost of capital which may not be sustained privately.

96. J.P. Morgan also published a report on August 8, 2018, titled, "Raise PT to Reflect Possible Go-Private Offer, But Remain Underweight on Chance Shares Could Again Trade on Fundamentals." J.P. Morgan stated:

On Tuesday during the market, Tesla CEO Elon Musk announced via Twitter that he is considering pursuing a path (no final decision has been made) which would take the company private at a price of \$420 per share. This was followed up by further statements that "funding has been secured" and "investor support confirmed". As surprising to us as these developments are, and as lacking as the statements are in any details regarding who is expected to provide the required amount of financing and on what terms, they are nevertheless declarative statements from the CEO of a public company which we feel should be considered seriously. Either funding is secured or it is not secured, and Tesla's CEO says funding is secured. Therefore, we are incorporating into our valuation the real possibility the equity will be taken out at \$420 per share. Separate from the Twitter statements, the company also made public a letter Mr. Musk had written to Tesla employees in which he states, "If the process ends the way I expect it will, a private Tesla would ultimately be an enormous opportunity for all of us." To us, this suggests more than mere consideration — Mr. Musk expects Tesla will go private. We are not as certain, and so assign only a 50% probability to such a scenario in our updated valuation. We continue to believe Tesla's valuation based on fundamentals alone (i.e., a 50/50 blend of DCF and 2020-based multiples analysis — itself consisting of a blend of P/E, EV/EBITDA, and Price-to-Sales) is worth no more than \$195 (our previous price target). But introducing a new 50% weighting of \$420 suggests a large upward revision to our price target is warranted, and we newly value Tesla at \$308 per share (i.e., 50/50 blend of \$195 and \$420).

We continue to rate TSLA shares Underweight: We remain Underweight-rated, including given the comparatively little +11% upside remaining vs. Tuesday's close to the purported \$420 take-out price in comparison to the much larger -49% downside to the \$195 we feel Tesla should trade at based upon an analysis of fundamentals alone. Our price target could move up or down based upon further developments affecting the likelihood the transaction will or will not go through.

• Details of the proposed transaction are very few at this time: Tesla provided no details regarding the needed funding, except to say that it has been secured. Mr. Musk stated current shareholders could continue to participate in the private company, suggesting the actual amount of needed cash could be far less than the firm's current equity valuation or enterprise value (equivalent to only the amount of shares tendered times \$420 per share). Mr. Musk plants to continue to own ~20%.

(Emphasis added in italics and bold)

97. On August 8, 2018, Evercore published an analyst report titled, "A Private Life is a Happy Life." The report stated in pertinent part:

#### A Private Life is a Happy Life

"Am considering taking Tesla private at \$420. Funding secured."

"Investor support is confirmed. Only reason why this is not certain is that it's contingent on a shareholder vote."

- What happened? The above are two of a series of tweets by Tesla CEO Elon Musk yesterday, where the company announced that it is considering going private. In an e-mail to employees, posted on the Tesla website, Musk outlined his reasons. Among them, Musk pointed out that as a public company Tesla is "subject to wild swings in our stock price that can be a major distraction", subject "to the quarterly earnings cycle that puts enormous pressure on Tesla to make decisions... not necessarily right for the long-term" and opens Tesla to short sellers "who have the incentive to attack the company". He also wrote that his other company SpaceX, which is private and Musk does not want to take public, "is far more operationally efficient, and that is largely due to the fact that it is privately held". We believe Musk's intent is serious and genuine.
- What is proposed? Clearly, CEO Musk would like to take the company private. Again, in the e-mail to employees, he stated that he would like a structure where existing shareholders "can stay investors in a private Tesla or... can be bought out at \$420 a share", his intention that "all Tesla employees... remain shareholders of the company" so that they can "share in the growing value of the company" and that there is no plan "to merge SpaceX and Tesla". Musk added that "this has nothing to do with accumulating control for myself. I own about 20% of the company now, and I don't envision that being substantially different".
- Could this happen? It is important to note that, as of today, no details have been provided with regards to what "Funding secured" means, who is providing that funding and what any potential funding structure might look like. Our view is that "Funding secured" should be interpreted as a strong verbal commitment, with funds available and parties willing to execute quickly. However, it could be less than this. It may also be that initial legal documents, term sheets, letters of intent have been signed. While several

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press reports suggest an "LBO", given Tesla's EBITDA and cash generation today, we don't see material leverage as likely. Instead, we see a possible scenario where 50 to 60% of existing shareholders (including Musk's 20% holding) continue, with their holdings rolled into a new private structure. This would leave Tesla needing to raise equity capital of \$31 to \$39Bn to buy out those existing public shareholders who tender; 40 to 50% of a \$78Bn market value (\$420 x 185Mn shares outstanding). We assume that the debt is rolled. We see the most likely route through which the \$31 to \$39Bn is funded being a combination of, 1/ a strategic investor acquiring a 15% to 20% stake, 2/ two to three private investment firms/ sovereign wealth funds acquiring up to 10% stakes and 3/ certain larger members of the existing shareholder base or some form of fund for smaller accredited investors making up the delta.

- Is going private the right move? The notion of going private is not new for Elon Musk. In an interview with Rolling Stone (Nov '17) Musk stated "I wish we could be private with Tesla... it actually makes us less efficient to be a public company". Musk's frustration with the capital markets, notably short sellers and the analyst community, has been evident in recent quarters. If a CEO, and the largest individual shareholder, of a company takes issue with public markets, then going private would seem to make sense. Traditionally, public markets have been there to provide a source of funding (note, we also believe they bring scrutiny and accountability which in many cases does lead to better practice). However, if a company does not need that funding or is able to source future funding privately, then there is no obvious reason for it to remain public. As Musk points out, being public does have disadvantages and can lead to short-termism. Depending on where the private funding may come from, going private may also provide Tesla with 1/ deeper pockets to grow internationally at a faster rate and 2/ security through the next US/capital markets recession where public funding would dry up.
- Stock Implications The majority of the move towards \$420 is now done, with the share price sitting within 11%. As a result, unless there is evidence to suggest that the funding is not secured and a transaction cannot be completed, we believe there is little to be done with the stock at these levels. More broadly, if Tesla has attracted a strategic investor who is willing to not only help take the company private but also to provide material funding going forward, it should enable the company to execute and move faster as it seeks to complete its mission to move the world to a solar electric future. In the context of the industry, this only increases the need for transition at traditional OEMs who must carry out exhaustive powertrain restructuring if they choose to compete with a potentially faster and more nimble Tesla.
- 98. On August 8, 2018, after the market closed, the *Wall Street Journal* reported that the SEC had commenced an investigation into whether Musk had "a factual basis for tweeting Tuesday

that the going-private transaction was all but certain, with only a shareholder vote needed to pull it off."

- 99. At close of trading on August 9, 2018, Tesla's stock price closed at \$352.45 per share, a decline of 5% from its prior close of \$370.34 per share on August 8, 2018.
- 100. On August 10, 2018, Musk tweeted: "Short shorts coming soon to Tesla merch[andise]."
- 101. Also on August 10, 2018, Wayne Kaufman of Phoenix Financial Services stated on CNBC that there was a real possibility for Tesla to go private and that Musk "hates running public companies."
- 102. On August 12, 2018, *Bloomberg* published a report on Tesla's progress towards going private. The report stated, in pertinent part, that the Public Investment Fund that Musk had met with on July 31, 2018, which "recently built a stake just shy of 5 percent, is exploring how it can be involved," but "hasn't made any firm decisions on whether to increase its stake, or by how much . . . ."
- 103. On August 13, 2018, Musk posted on Tesla's blog during morning market hours. The blog post is titled "Update on Taking Tesla Private and states:

As I announced last Tuesday, I'm considering taking Tesla private because I believe it could be good for our shareholders, enable Tesla to operate at its best, and advance our mission of accelerating the transition to sustainable energy. As I continue to consider this, I want to answer some of the questions that have been asked since last Tuesday.

### What has happened so far?

On August 2nd, I notified the Tesla board that, in my personal capacity, I wanted to take Tesla private at \$420 per share. This was a 20% premium over the ~\$350 then current share price (which already reflected a ~16% increase in the price since just prior to announcing Q2 earnings on August 1st). My proposal was based on using a structure where any existing shareholder who wished to remain as a shareholder in a private Tesla could do so, with the \$420 per share buyout used only for shareholders that preferred that option.

After an initial meeting of the board's outside directors to discuss my proposal (I did not participate, nor did Kimbal), a full board meeting was held. During that meeting, I told the board about the funding discussions that had taken place (more on that below) and I explained why this could be in Tesla's long-term interest.

At the end of that meeting, it was agreed that as a next step, I would reach out to some of Tesla's largest shareholders. Our largest investors have been extremely supportive of Tesla over the years, and understanding whether they had the ability and desire to remain as shareholders in a private Tesla is of critical importance to me. They are the ones who believed in Tesla when no one else did and they are the ones who most believe in our future. I told the board that I would report back after I had these discussions.

#### Why did I make a public announcement?

The only way I could have meaningful discussions with our largest shareholders was to be completely forthcoming with them about my desire to take the company private. However, it wouldn't be right to share information about going private with just our largest investors without sharing the same information with all investors at the same time. As a result, it was clear to me that the right thing to do was announce my intentions publicly. To be clear, when I made the public announcement, just as with this blog post and all other discussions I have had on this topic, I am speaking for myself as a potential bidder for Tesla.

#### Why did I say "funding secured"?

Going back almost two years, the Saudi Arabian sovereign wealth fund has approached me multiple times about taking Tesla private. They first met with me at the beginning of 2017 to express this interest because of the important need to diversify away from oil. They then held several additional meetings with me over the next year to reiterate this interest and to try to move forward with a going private transaction. Obviously, the Saudi sovereign fund has more than enough capital needed to execute on such a transaction.

Recently, after the Saudi fund bought almost 5% of Tesla stock through the public markets, they reached out to ask for another meeting. That meeting took place on July 31st. During the meeting, the Managing Director of the fund expressed regret that I had not moved forward previously on a going private transaction with them, and he strongly expressed his support for funding a going private transaction for Tesla at this time. I understood from him that no other decision makers were needed and that they were eager to proceed.

I left the July 31st meeting with no question that a deal with the Saudi sovereign fund could be closed, and that it was just a matter of getting the process moving. This is why I referred to "funding secured" in the August 7th announcement.

Following the August 7th announcement, I have continued to communicate with the Managing Director of the Saudi fund. He has expressed support for proceeding subject to financial and other due diligence and their internal review process for obtaining approvals. He has also asked for additional details on how the company would be taken private, including any required percentages and any regulatory requirements.

Another critical point to emphasize is that before anyone is asked to decide on going private, full details of the plan will be provided, including the proposed nature and source of the funding to be used. However, it would be premature to do so now. I continue to have discussions with the Saudi fund, and I also am having discussions with a number of other investors, which is something that I always planned to do since I would like for Tesla to continue to have a broad investor base. It is appropriate to complete those discussions before presenting a detailed proposal to an independent board committee.

It is also worth clarifying that most of the capital required for going private would be funded by equity rather than debt, meaning that this would not be like a standard leveraged buyout structure commonly used when companies are taken private. I do not think it would be wise to burden Tesla with significantly increased debt.

Therefore, reports that more than \$70B would be needed to take Tesla private dramatically overstate the actual capital raise needed. The \$420 buyout price would only be used for Tesla shareholders who do not remain with our company if it is private. My best estimate right now is that approximately two-thirds of shares owned by all current investors would roll over into a private Tesla.

#### What are the next steps?

As mentioned earlier, I made the announcement last Tuesday because I felt it was the right and fair thing to do so that all investors had the same information at the same time. I will now continue to talk with investors, and I have engaged advisors to investigate a range of potential structures and options. Among other things, this will allow me to obtain a more precise understanding of how many of Tesla's existing public shareholders would remain shareholders if we became private.

If and when a final proposal is presented, an appropriate evaluation process will be undertaken by a special committee of Tesla's board, which I understand is already in the process of being set up, together with the legal counsel it has selected. If the board process results in an approved plan, any required regulatory approvals will need to be obtained and the plan will be presented to Tesla shareholders for a vote.

- 104. On August 13, 2018, at 9:02 p.m. ET, Musk tweeted: "I'm excited to work with Silver Lake and Goldman Sachs as financial advisors, plus Wachtell, Lipton, Rosen & Katz and Munger, Tolles & Olson as legal advisors, on the proposal to take Tesla private."
- 105. Morningstar issued an Analyst Note on August 13, 2018, titled "Tesla Buyout Looks likely to Us, but Timing and Structure Uncertain." Morningstar states in pertinent part:

Tesla CEO Elon Musk issued a blog post Aug. 13 that states he is still gauging shareholder interest in Tesla going private at \$420 a share, but our impression of his words is that he thinks it can happen, and we agree. Tesla's board still must receive a formal proposal and then will have to evaluate it, so we think a deal will

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not happen this week but will eventually be announced. Musk also said the Saudi Arabian sovereign wealth fund has taken almost a 5% stake in Tesla, and he met with it recently about going private. All shareholders would have the choice of having their stock bought out at \$420 a share or remaining invested in a private Tesla. We speculate that retail investors may have their equity moved to a publicly traded special-purpose vehicle while accredited investors would only be able to buy or sell shares every six months

We are maintaining our fair value estimate. We have changed our thinking since our Aug. 7 note and will not be raising our fair value estimate to the deal price. We normally would increase our valuation to a probability-weighted average of the offered price and our intrinsic value. However, Tesla's possible buyout is abnormal in that equityholders have the option to remain equityholders in a private Tesla, or at least own a special-purpose vehicle that would in turn own private Tesla, so we view this deal as similar to a tender offer. We see Tesla's equity ownership merely transferring to a different vehicle rather than going away as in a traditional buyout, so we do not see a deal changing our opinion of the intrinsic value of Tesla's publicly traded stock.

We think \$420 is way too high a value, given our \$179 fair value estimate. To generate a \$420 per share valuation in our discounted cash flow model, we would need to almost triple our current projection for 2027 midcycle EBIT margin from 9% to nearly 23%. If someone wants to overpay, however, we can't say it's a bad deal for shareholders.

. . .

Musk in an Aug. 7 tweet said, "Investor support is confirmed. Only reason why this is not certain is that it's contingent on a shareholder vote." We think this statement means Musk believes he has enough votes to go private. Musk also said in the Aug. 13 blog post that he estimates about two thirds of shareholders would go private and therefore not sell at \$420. It sounds to us that he is not done talking to shareholders to gauge interest, but his estimate of about 66% of shareholders not tendering is not far off from our own assumption of 60%. We expect a deal, if announced, would be approved, and we estimate about 40% of shareholders will sell their shares at \$420 or whatever a deal price ends up being, mostly due to their own mandates on not being able to hold private stock or caps on illiquid securities. This assumption puts the shareholder buyout price at \$28.7 billion, by our calculation. We think most shareholders believe in Musk and want to remain invested with him. The six largest shareholders (Musk, Fidelity, Baillie Gifford, T. Rowe Price, TenCent, and the Saudi Arabia sovereign wealth fund) own about 53% of the stock by our estimates. We'd expect all these owners to not sell any of their stock because we think they believe Tesla can be far bigger than it is today. We do expect some forced selling from entities that cannot own private companies, such as index funds or some exchange-traded funds, but we think most Tesla retail and institutional shareholders are very loyal and patient with Musk and will want to remain invested. We think if the deal fails to happen, it would be due to regulatory issues mentioned earlier rather than lack of available capital. Musk said the Saudi sovereign wealth fund has been meeting with him since early 2017, trying to get him to take Tesla private, and at a July 31 meeting this year expressed regret to Musk that he has not taken it up on its offer. We assume the Saudis would put up sizable capital to help fund the deal and that is why Musk's first Aug. 7 tweet on a buyout said, "funding secured."

106. On August 14, 2018, before the market opened, Tesla issued a statement indicating that Tesla's Board had formed a special committee in connection with the going-private transaction. The statement read as follows:

Tesla, Inc. (the "Company") announced today that its Board of Directors has formed a special committee comprised of three independent directors to act on behalf of the Company in connection with Elon Musk's previously announced consideration of a transaction to take the Company private (the "Going Private Transaction"). The special committee has not yet received a formal proposal from Mr. Musk regarding any Going Private Transaction nor has it reached any conclusion as to the advisability or feasibility of such a transaction.

The special committee is composed of Brad Buss, Robyn Denholm and Linda Johnson Rice. The special committee has retained Latham & Watkins LLP as its legal counsel and intends to retain an independent financial advisor to assist in its review of a formal proposal once received. The Company has separately retained Wilson Sonsini Goodrich & Rosati as its legal counsel in this matter.

The special committee has the full power and authority of the Board of Directors to take any and all actions on behalf of the Board of Directors as it deems necessary to evaluate and negotiate a potential Going Private Transaction and alternatives to any transaction proposed by Mr. Musk. The special committee's grant of authority provides that no Going Private Transaction will be consummated without the approval of the special committee. The special committee expects to provide a further update concerning the process associated with Mr. Musk's proposal as soon as practicable.

No assurances can be given regarding the likelihood, terms and details of any proposal or potential Going Private Transaction, that any proposal made by Mr. Musk regarding a potential Going Private Transaction will be accepted by the special committee, that definitive documentation relating to any such Going Private Transaction will be executed or that such a transaction will be completed.

107. On August 14, 2018, around 12:53 p.m. ET, Bloomberg reported that neither Goldman Sachs nor Silver Lake were yet working with Musk pursuant to a signed agreement or in an official capacity. Later on August 14, 2018, the *New York Times* reported that Goldman "was in talks with Tesla about a possible role, but had not finalized anything. Silver Lake, meanwhile, is interested in investing in any going-private deal, but it isn't acting in a paid advisory capacity."

- 108. At close of trading on August 14, 2018, Tesla's stock price closed at \$347.64 per share, a decline of 2.5% from its prior close of \$356.41 on August 13, 2018.
- 109. On August 15, 2018, the *Wall Street Journal*, *Business Insider*, and *Fox Business* reported that the SEC had issued formal subpoenas concerning Musk's going-private tweets.
- 110. At close of trading on August 15, 2018, Tesla's stock price closed at \$338.69 per share, a decline of 2.6% from its prior close of \$347.64 on August 14, 2018.
- 111. On August 16, 2018, the *Wall Street Journal* reported that the "SEC [was] investigating whether Mr. Musk intentionally misled investors when he tweeted about the proposal in a bid to hurt short-sellers by driving up Tesla's stock price," citing a person familiar with the matter. The article further stated that "regulators [were] pressing Tesla's directors to reveal how much information Mr. Musk shared with them before he tweeted about it last week."
- 112. On August 16, 2018, after the market closed, *The New York Times* published online an article based on an in-depth interview with Musk. In addition to reporting on his health issues, Musk acknowledged in the article that he had chosen the proposed price of \$420 per share because of "better karma" and that no-one had seen or reviewed his August 7, 2018 tweet "Am considering taking Tesla private at \$420. Funding secured." before he posted it. The article also noted that the funding for the proposed going-private transaction "was far from secure" and the Public Investment Fund "had not committed to provide any cash."
  - 113. The New York Times article appeared in print on August 17, 2018.
- 114. At close of trading on August 17, 2018, Tesla's stock price closed at \$305.50 per share, a decline of 9% from its prior close of \$335.45 on August 16, 2018.
- 115. On August 24, 2018, at 11:15 p.m. ET, a blog post titled "Staying Public" was published on Tesla's website. The post announced that Musk had abandoned the process of attempting to take Tesla private, stating as follows:

Earlier this month, I announced that I was considering taking Tesla private. As part of the process, it was important to understand whether our current investors believed this would be a good strategic move and whether they would want to participate in a private Tesla.

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Our investors are extremely important to me. Almost all have stuck with us from the time we went public in 2010 when we had no cars in production and only a vision of what we wanted to be. They believe strongly in our mission to advance sustainable energy and care deeply about our success.

I worked with Silver Lake, Goldman Sachs and Morgan Stanley, who have worldclass expertise in these matters, to consider the many factors that would come into play in taking Tesla private, and to process all the incoming interest that we received from investors to fund a go-private transaction. I also spent considerable time listening to current shareholders, large and small, to understand what they think would be in the best long-term interests of Tesla.

Based on all the discussions that have taken place over the last couple of weeks and a thorough consideration of what is best for the company, a few things are clear to me:

- Given the feedback I've received, it's apparent that most of Tesla's existing shareholders believe we are better off as a public company. Additionally, a number of institutional shareholders have explained that they have internal compliance issues that limit how much they can invest in a private company. There is also no proven path for most retail investors to own shares if we were private. Although the majority of shareholders I spoke to said they would remain with Tesla if we went private, the sentiment, in a nutshell, was "please don't do this."
- I knew the process of going private would be challenging, but it's clear that it would be even more time-consuming and distracting than initially anticipated. This is a problem because we absolutely must stay focused on ramping Model 3 and becoming profitable. We will not achieve our mission of advancing sustainable energy unless we are also financially sustainable.
- That said, my belief that there is more than enough funding to take Tesla private was reinforced during this process.

After considering all of these factors, *I met with Tesla's Board of Directors* yesterday and let them know that *I believe the better path is for Tesla to remain public*. The Board indicated that they agree.

Moving forward, we will continue to focus on what matters most: building products that people love and that make a difference to the shared future of life on Earth. We've shown that we can make great sustainable energy products, and we now need to show that we can be sustainably profitable. With all the progress we've made on Model 3, we're positioned to do this, and that's what the team and I are going to be putting all of our efforts toward.

Thank you to all of our investors, customers and employees for the support you've given our company. I'm incredibly excited to continue leading Tesla as a public company. It is a privilege.

(Emphasis added).

116. On September 27, 2018, the SEC filed a complaint against Musk alleging violations of Section 10(b) of the Securities Exchange Act of 1934 and Rule 10b-5. Two days later, on September 29, 2018, the SEC filed a complaint against Tesla alleging violations of Rule 13a-15 under the Securities Exchange Act of 1934. Both Musk and Tesla later consented to judgments being entered against them. The judgments ordered Musk to resign as Tesla's Chairman, ordered Tesla to appoint additional independent directors, and required Tesla and Musk to each pay a \$20 million penalty (\$40 million total). The United States District Court for the Southern District of New York approved the settlements and the accompanying judgments and consents on October 16, 2018.

# VI. COUNT I: VIOLATION OF SECTION 10(b) AND RULE 10b-5 AGAINST TESLA AND MUSK

- 117. Plaintiff repeats and realleges each and every allegation contained above as if fully set forth herein.
- 118. During the Class Period, Tesla and Musk carried out a plan, scheme and course of conduct which was intended to and, throughout the Class Period, did: (1) deceive the investing public, including Plaintiff and other Class members, as alleged herein; and (2) cause Plaintiff and other Class members to purchase or sell Tesla securities at artificial prices. In furtherance of this unlawful scheme, plan and course of conduct, each of Tesla and Musk took the actions set forth herein.
- 119. Tesla and Musk: (a) employed devices, schemes, and artifices to defraud; (b) made untrue statements of material fact and/or omitted to state material facts necessary to make the statements not misleading; and (c) engaged in acts, practices, and a course of business that operated as a fraud and deceit upon the purchasers and sellers of Tesla's securities in an effort to artificially affect the price of Tesla securities in violation of Section 10(b) of the Securities Exchange Act and Rule 10b-5 promulgated thereunder.

#### A. False and Materially Misleading Statements

120. On August 7, 2018, Musk publicly stated via Twitter: "Am considering taking Tesla private at \$420. Funding secured."

- 121. The above statement in paragraph 120 was false and materially misleading because funding for a go-private transaction had in fact not been "secured". Further, although the tweet communicated to investors that a going-private transaction was imminent, Musk and Tesla had yet to take or even consider many of the necessary steps required to actually effect such a transaction. Specifically,
  - (a) There was no agreement to fund a going-private transaction involving Tesla;
  - (b) Musk had not discussed the potential price of \$420 with the Public Investment Fund or any other potential investor;
  - (c) Musk had not had any further substantive conversations with the Public Investment Fund since his meeting on July 31, 2018;
  - (d) Musk had not discussed interest in participating in the transaction with any potential strategic investors;
  - (e) Musk had not provided Tesla's Board with a specific proposal to take the company private, only a tentative offer with "a lot of uncertainty" that Musk believed only had a 50% likelihood of success;
  - (f) Musk had not contacted existing Tesla shareholders to assess their interest in participating in the transaction;
  - (g) Musk had not formally retained any legal or financial advisors to assist with the transaction;
  - (h) Musk had not determined whether retail investors would be able to remain shareholders but had been advised that it would be unlikely and "unprecedented";
  - (i) Musk had not determined whether there were restrictions on illiquid holdings by Tesla's institutional investors;
  - (j) Musk had not determined what regulatory approvals would be necessary for the transaction; and
  - (k) Musk had no formal agreement, commitment, or plan for Tesla to go private at \$420 per share or at any other price.

- 122. On August 7, 2018, Musk responded to another Twitter user's question, "At what price?" by repeating "420."
- 123. The above statement in paragraph 122 was false and materially misleading because the tweet communicated to investors that a going-private transaction at \$420 per share was imminent, when Musk and Tesla had yet to take or even consider many of the necessary steps required to actually effect such a transaction. Specifically,
  - (a) Musk had not discussed the potential price of \$420 with the Public Investment Fund or any other potential investor;
  - (b) Musk had not had any further substantive conversations with the Public Investment Fund since his meeting on July 31, 2018;
  - (c) Musk had not discussed interest in participating in the transaction with any potential strategic investors;
  - (d) Musk had not provided Tesla's Board with a specific proposal to take the company private, only a tentative offer with "a lot of uncertainty" that Musk believed only had a 50% likelihood of success;
  - (e) Musk had not contacted existing Tesla shareholders to assess their interest in participating in the transaction;
  - (f) Musk had not formally retained any legal or financial advisors to assist with the transaction;
  - (g) Musk had not determined whether retail investors would be able to remain shareholders but had been advised that it would be unlikely and "unprecedented";
  - (h) Musk had not determined whether there were restrictions on illiquid holdingsby Tesla's institutional investors;
  - (i) Musk had not determined what regulatory approvals would be necessary for the transaction; and
  - (j) Musk had no formal agreement, commitment, or plan for Tesla to go private at \$420 per share or at any other price.

- 124. On August 7, 2018, a Twitter user asked Musk: "Could we still invest once private?" Musk responded, "Yes, but liquidity events would be limited to every 6 months or so (like SpaceX)."
- 125. The above statement in paragraph 124 was false and materially misleading because the tweet communicated to investors that a going-private transaction was imminent, when Musk and Tesla had yet to take or even consider many of the necessary steps required to actually effect such a transaction. Specifically,
  - (a) Musk had not provided Tesla's Board with a specific proposal to take the company private, only a tentative offer with "a lot of uncertainty" that Musk believed only had a 50% likelihood of success;
  - (b) Musk had not contacted existing Tesla shareholders to assess their interest in participating in the transaction;
  - (c) Musk had not formally retained any legal or financial advisors to assist with the transaction;
  - (d) Musk had not determined whether retail investors would be able to remain shareholders but had been advised that it would be unlikely and "unprecedented";
  - (e) Musk had not determined whether there were restrictions on illiquid holdings by Tesla's institutional investors;
  - (f) Musk had not determined what regulatory approvals would be necessary for the transaction; and
  - (g) Musk had no formal agreement, commitment, or plan for Tesla to go private at \$420 per share or at any other price.
- 126. On August 7, 2018, Musk tweeted, "Shareholders could either to [sic] at 420 or hold shares & go private."
- 127. The above statement in paragraph 126 was false and materially misleading because the tweet communicated to investors that a going-private transaction at \$420 per share was

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1	imminent, when Musk and Tesla had yet to take or even consider many of the necessary steps			
2	required to actually effect such a transaction. Specifically,			
3	(a)	Musk had not discussed the potential price of \$420 with the Public		
4		Investment Fund or any other potential investor;		
5	(b)	Musk had not had any further substantive conversations with the Public		
6		Investment Fund since his meeting on July 31, 2018;		
7	(c)	Musk had not discussed interest in participating in the transaction with any		
8		potential strategic investors;		
9	(d)	Musk had not provided Tesla's Board with a specific proposal to take the		
10		company private, only a tentative offer with "a lot of uncertainty" that Musk		
1		believed only had a 50% likelihood of success;		
12	(e)	Musk had not contacted existing Tesla shareholders to assess their interest		
13		in participating in the transaction;		
14	(f)	Musk had not formally retained any legal or financial advisors to assist with		
15		the transaction;		
16	(g)	Musk had not determined whether retail investors would be able to remain		
17		shareholders but had been advised that it would be unlikely and		
18		"unprecedented";		
19	(h)	Musk had not determined whether there were restrictions on illiquid holdings		
20		by Tesla's institutional investors;		
21	(i)	Musk had not determined what regulatory approvals would be necessary for		
22		the transaction; and		
23	(j)	Musk had no formal agreement, commitment, or plan for Tesla to go private		
24		at \$420 per share or at any other price.		
25	128. On A	August 7, 2018, at 3:16 p.m. ET, Musk sent an email to Tesla employees that		
26	was published to Te	sla's publically available blog at 3:32 p.m. ET. Musk stated in his email: "First		
27	I would like to structure this so that all shareholders have a choice. Either they can stay investor			
28	in a private Tesla or they can be bought out at \$420 per share"			

- 129. The above statement in paragraph 128 was false and materially misleading because Musk and Tesla had no agreement or plan for taking Tesla private, and know it was unlikely that most shareholders of the public entity could remain shareholders in a private company. Specifically, this statement was misleading because:
  - (a) Musk had not discussed the potential price of \$420 with the Public Investment Fund or any other potential investor;
  - (b) Musk had not had any further substantive conversations with the Public Investment Fund since his meeting on July 31, 2018;
  - (c) Musk had not discussed interest in participating in the transaction with any potential strategic investors;
  - (d) Musk had not provided Tesla's Board with a specific proposal to take the company private, only a tentative offer with "a lot of uncertainty" that Musk believed only had a 50% likelihood of success;
  - (e) Musk had not contacted existing Tesla shareholders to assess their interest in participating in the transaction;
  - (f) Musk had not formally retained any legal or financial advisors to assist with the transaction;
  - (g) Musk had not determined whether retail investors would be able to remain shareholders;
  - (h) Musk had not determined whether there were restrictions on illiquid holdingsby Tesla's institutional investors;
  - (i) Musk had not determined what regulatory approvals would be necessary for the transaction; and
  - (j) Musk had no formal agreement, commitment, or plan for Tesla to go private at \$420 per share or at any other price.
- 130. On August 7, 2018, at 3:36 p.m. ET, Musk publicly stated via Twitter: "Investor support is confirmed. Only reason why this is not certain is that it's contingent on a shareholder vote."

- Musk and Tesla had yet to take, or even consider, many of the steps necessary to effect a going-private transaction. Of particular significance was the fact that Musk and Tesla had not even "secured" funding to take the company private at \$420 per share or at any other price. Whether or not Tesla could go-private depended on a number of other issues in addition to a "shareholder vote," including whether Tesla's Board would approve the transaction and whether the company would agree to deal terms associated with funding the transaction. For example, the Public Investment Fund had indicated that its investment was possibly contingent upon Tesla building a production facility in the Middle East. On this particular point, at least one Tesla Board member described such a condition as a "non-starter." Specifically, this statement was misleading because:
  - (a) There was no agreement to fund a going-private transaction involving Tesla;
  - (b) Musk had not discussed the potential price of \$420 with the Public Investment Fund or any other potential investor;
  - (c) Musk had not had any further substantive conversations with the Public Investment Fund since his meeting on July 31, 2018;
  - (d) Musk had not discussed interest in participating in the transaction with any potential strategic investors;
  - (e) Musk had not provided Tesla's Board with a specific proposal to take the company private, only a tentative offer with "a lot of uncertainty" that Musk believed only had a 50% likelihood of success;
  - (f) Musk had not contacted existing Tesla shareholders to assess their interest in participating in the transaction;
  - (g) Musk had not formally retained any legal or financial advisors to assist with the transaction;
  - (h) Musk had not determined whether retail investors would be able to remain shareholders;
  - (i) Musk had not determined whether there were restrictions on illiquid holdings by Tesla's institutional investors;

- (j) Musk had not determined what regulatory approvals would be necessary for the transaction; and
- (k) Musk had no formal agreement, commitment, or plan for Tesla to go private at \$420 per share or at any other price.
- 132. Collectively, Musk's August 7, 2018 statements gave Tesla investors and the market the impression that if Musk chose to take Tesla private at \$420 per share, the only outstanding requirement to be satisfied was a shareholder vote. For the reasons set forth above, this was false and misleading.
- 133. Musk's August 7, 2018 statements, collectively, also gave Tesla investors and the market the impression that certain terms of the going-private transaction had been agreed when, in fact, they had not even been explored, and in some cases, proved to be impossible. For the reasons set forth above, this was false and misleading.
- 134. On August 13, 2018, Tesla published a post written by Musk on its website concerning Musk's "funding secured" tweet and plans for taking Tesla private. In the blog post, Musk stated that "My proposal was based on using a structure where any existing shareholder who wished to remain as a shareholder in a private Tesla could do so, with the \$420 per share buyout used only for shareholders that preferred that option."
- 135. The above statement in paragraph 134 was false and materially misleading because Musk and Tesla had yet to take, or even consider, many of the steps necessary to effect a going-private transaction with structure described by Musk. Specifically, this statement was misleading because:
  - (a) There was no agreement to fund a going-private transaction involving Tesla;
  - (b) Musk had not discussed the potential price of \$420 with the Public Investment Fund or any other potential investor;
  - (c) Musk had not discussed interest in participating in the transaction with any potential strategic investors;

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1	(	(d)	Musk had not provided Tesla's Board with a specific proposal to take the
2			company private, only a tentative offer with "a lot of uncertainty" that Musk
3			believed only had a 50% likelihood of success;
4	(	(e)	Musk had not contacted existing Tesla shareholders to assess their interest
5			in participating in the transaction;
6	(:	(f)	Musk had not formally retained any legal or financial advisors to assist with
7			the transaction;
8	()	g)	Musk had not determined whether retail investors would be able to remain
9			shareholders;
10	(	(h)	Musk had not determined whether there were restrictions on illiquid holdings
11			by Tesla's institutional investors;
12	(:	i)	Musk had not determined what regulatory approvals would be necessary for
13			the transaction; and
14	(	j)	Musk had no formal agreement, commitment, or plan for Tesla to go private
15			at \$420 per share or at any other price.
16	136. I	n his A	August 13, 2018 blog post published by Tesla, Musk also wrote:
17	Why did I say "funding secured"?		
18	Going back almost two years, the Saudi Arabian sovereign wealth fund has approached me multiple times about taking Tesla private. They first met with me at the beginning of 2017 to express this interest because of the important need to diversify away from oil. They then held several additional meetings with me over the next year to reiterate this interest and to try to move forward with a going private transaction. Obviously, the Saudi sovereign fund has more than enough capital needed to execute on such a transaction.		
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23	Recently, after the Saudi fund bought almost 5% of Tesla stock through the public markets, they reached out to ask for another meeting. That meeting took place on July 31st. During the meeting, the Managing Director of the fund expressed regret that I had not moved forward previously on a going private transaction with them, and he strongly expressed his support for funding a going private transaction for Tesla at this time. I understood from him that no other decision makers were needed and that they were eager to proceed.		
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I left the July 31st meeting with no question that a deal with the Saudi sovereign fund could be closed, and that it was just a matter of getting the process moving. This is why I referred to "funding secured" in the August 7th announcement.

- Musk's professed belief that there was "no question that a deal with the Saudi sovereign fund could be closed" was false and materially misleading because Musk knew there was "a lot of uncertainty" about the potential funding from the Public Investment Fund with a likelihood of success of just 50%. During the July 31, 2018 meeting with the Public Investment Fund, Musk also knew that that funding might be contingent upon whether Tesla would build a production facility in the Middle East which at least one Tesla Board member referred to as a "non-starter." Consequently, although Musk claimed to have "no question" that funding could be "secured," issues in fact existed that could prevent Tesla and Musk from obtaining the capital necessary to complete the transaction.
- 138. Tesla's and Musk's blog post also continued to omit and/or conceal that an agreement had not yet been secured from any potential source of funding to fund a going-private transaction at a price of \$420 per share or that it was unlikely that current shareholders of the public company could remain shareholders once it went private.
- 139. On August 13, 2018, at 9:02 p.m. ET, Musk publicly stated via Twitter: "I'm excited to work with Silver Lake and Goldman Sachs as financial advisors, plus Wachtell, Lipton, Rosen & Katz and Munger, Tolles & Olson as legal advisors, on the proposal to take Tesla private."
- 140. The above statement in paragraph 139 was false and materially misleading because Musk and Tesla had not signed an agreement to formally engage or retain Silver Lake and Goldman Sachs to assist with the going-private transaction by August 13, 2018.

#### B. Musk and Tesla Acted with Scienter

- 1. <u>Musk knew that his statements were false and misleading.</u>
- 141. The misrepresentations alleged herein were made by Musk while he was in possession of material, non-public information that contradicted his public statements and/or rendered them materially false and misleading.
- 142. Musk knew that funding for a going-private transaction had not been "secured" at the time of his initial tweet on August 7, 2018 and was never secured during the Class Period. Based

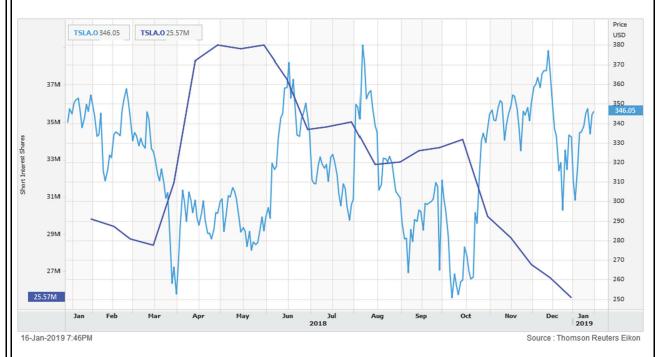
on Musk's integral role in the discussions with the Public Investment Fund, Musk knew that he: (1) had not agreed upon any terms for a going-private transaction with the fund or any other funding source; (2) had no further substantive communications with representatives of the fund beyond their 30 to 45 minute meeting on July 31, 2018 until August 10, 2018; (3) had never discussed a going-private transaction at a share price of \$420 with any potential funding source; (4) had not contacted any additional potential strategic investors to assess their interest in participating in a going-private transaction; and (5) that Tesla building a production facility in the Middle East as a prerequisite to the funding of any deal was a "non-starter."

- 143. Musk knew on August 7, 2018 and at all relevant times during the Class Period that he had not provided Tesla's Board with a specific proposal to take the company private, only a tentative offer with "a lot of uncertainty" that Musk believed only had a 50% likelihood of success
- 144. Musk also knew that on August 7, 2018 and at all relevant times during the Class Period he had not contacted existing Tesla shareholders to assess their interest in remaining invested in Tesla as a private company.
- 145. Musk also knew that neither he nor Tesla retained any financial advisors regarding the going-private transaction until August 15, 2018 when Tesla retained Goldman Sachs in that capacity.
- 146. Musk knew on August 7, 2018 he had not formally retained any legal advisors to assist with a going-private transaction.
- 147. Musk knew that on August 7, 2018 and at all relevant times during the Class Period he had not determined whether retail investors could remain invested in Tesla as a private company. Prior to Musk's August 7, 2018 statements, Musk had conversations with both a private equity manager and Tesla's Board concerning Musk's hopes for the structure of a private Tesla. Musk was told by the private equity manager and at least one director that the structure was "unprecedented" and that it would be "really difficult for small investors" to remain shareholders in a private Tesla. Musk admitted to the SEC that his proposal to allow retail investors to remain investors in Tesla as a private company was "a fundamental misunderstanding that I just did not know I thought there

would be some way to retain small investors, but there isn't." Therefore, Musk knew his representations to investors that they could remain shareholders were materially misleading.

- 148. Musk knew that on August 7, 2018 and at all relevant times during the Class Period, he had not determined whether there were restrictions on illiquid holdings by Tesla's institutional investors.
- 149. Musk knew that on August 7, 2018 and at all relevant times during the Class Period, he had not determined what regulatory approvals would be required or whether they could be satisfied.
- 150. Musk also knew there had been no agreement to take Tesla private at \$420 per share. Instead, Musk unilaterally decided on this amount simply by adding a 20% premium to Tesla's current stock price and rounding up to \$420. This was intended as a joke for Musk's girlfriend which Musk admitted to the SEC "is not a great reason to pick a price." Musk knew he had not discussed this price with the Public Investment Fund or any other potential funding source.
- 151. Musk's intent is further supported by the fact that he continued to make false statements about Tesla going private even after he was warned about potential legal problems stemming from market manipulation. On August 7, 2018, at 2:23 p.m. ET, a reporter warned Musk via email that he was "dancing into some pretty tricky legal territory by messing about with the markets this way." Notwithstanding, Musk continued to mislead the public about Tesla going private.
  - 2. <u>Musk had a motive to commit fraud: his campaign against short sellers.</u>
  - 152. Musk's conduct was motivated by his animosity towards Tesla's short sellers.
- 153. Prior to Musk's August 7, 2018 tweets, on May 4, 2018, Musk told investors "oh and uh short burn of the century comin soon. Flamethrowers should arrive just in time." Shortly after, Musk stated, "Looks like sooner than expected. The sheer magnitude of short carnage will be unreal. If you're short, I suggest tiptoeing quietly to the exit . . . ."
- 154. Just three days later, on May 7, 2018, Musk bought about \$9.85 million worth of Tesla shares in the pre-market in a manner designed have the greatest impact on Tesla's stock price and force a burst of short-covering.

- 155. Musk did this again on June 12, 2018 when he bought about \$24.9 million worth of Tesla stock to maintain Tesla's stock price despite announcing that Tesla was cutting 46,000 employees, about 9% of its workforce.
- In his August 2, 2018 email to the Board, Musk stated that he wanted to take Tesla 156. private in order to, among other reasons, avoid the "constant defamatory attacks by the short-selling community" against Tesla.
- 157. Musk's false and materially misleading statements on August 7, 2018 were part of his efforts to harm short sellers of Tesla stock.
- 158. On August 7, 2018, following his initial tweet, Musk stated that Tesla "[will] be way smoother & less disruptive as a private company. Ends negative propaganda from shorts." This mention of short sellers just after Musk's initial tweet shows that Musk made his false statements with short sellers in mind.
- 159. In Musk's August 7, 2018 email to the company, Musk stated again that he wanted to take Tesla private because Tesla was "the most shorted stock in the history of the stock market" and stated that "being public means there are large numbers of people who have incentive to attack the company."
- Musk even mocked short sellers after his August 7, 2018 tweets. For example, on 160. August 10, 2018, Musk tweeted that "Short shorts [were] coming soon to Tesla merch[andise]." This was Musk's way of mocking short sellers for their losses due from Musk's false and materially misleading tweets.
- 161. The following chart illustrates Tesla's growing short interest relative to the company's stock price during the period from January 2018 through December 2018. The chart also demonstrates the effect Musk's "funding secured" tweet had on Tesla's short interest:



162. Further evidence that Musk's misrepresentations were made to "burn" short sellers is Musk's tweet following his settlement with the SEC admitting allegations of fraud based on those same misrepresentations. On October 4, 2018, just five days following Musk's settlement with the SEC, Musk tweeted, "Just want to that [sic] the Shortseller Enrichment Commission is doing incredible work. And the name change is so on point!" This again shows that Musk associated his misrepresentations with short sellers and that his statements were a deliberate attempt to "burn" short sellers and cause them financial harm.

163. In addition to Musk's disputes with short sellers of Tesla stock, Musk and Tesla were motivated to artificially inflate Tesla's stock because of a provision in Tesla's convertible bonds. Tesla has a \$920 million 0.25% convertible issue due February 27, 2019. These bonds are convertible into common stock at a price of \$359.8676 per share. Therefore, if the stock trades below that price, the holder would be better off taking cash. That would put pressure on Tesla which is cash deficient. However, by inflating Tesla's stock, Tesla would be able to redeem the debt in stock, obviating the need to come up with over \$900 million in cash.

164. In addition, Tesla has 1.25% convertible totaling \$1.38 billion that matures February 25, 2021. This issue also converts at the same price, and a common share price over \$360 also would obviate the need to pay off this convert in cash.

165. As Barron's reported on August 7, 2018, "The surge in Tesla's shares after CEO Elon Musk's tweet about going private has had huge, salutary effect on its key convertible bonds and its financing position." Barron's stated that "[b]y pushing [Tesla's] common stock's price above the \$360 level, his tweet has put a \$900 million convert issue above its conversion price, which would effectively let the electric-auto maker pay off that obligation in stock instead of cash."

#### 3. Alternatively, Musk acted with deliberate recklessness.

- 166. Alternatively, Musk was deliberately reckless in publishing his tweets and other statements regarding the potential going-private transaction. He published his statements knowing that there were no formal agreements to secure funding or to document a proposal to go private at \$420 per share that was ready to be voted on by stockholders. He did not discuss the content of his August 7, 2018 tweets with anyone else prior to publishing them to his over 22 million Twitter followers and anyone else with access to the Internet. He also did not inform NASDAQ that he intended to make his initial public announcement, as NASDAQ rules required.
- 167. Musk's conduct represented an extreme departure from the standards of ordinary care, and presented a danger of misleading purchasers or sellers of Tesla securities that was either known to Musk or else was so obvious that Musk must have been aware of it.

#### 4. <u>Musk and Tesla settled quickly with the SEC.</u>

- 168. On September 27, 2018, the SEC filed a Complaint against Musk alleging that he violated Section 10(b) of the Securities Exchange Act of 1934 and Rule 10b-5 when making his August 7, 2018 statements.
- 169. On September 28, 2018, Musk signed a Consent to entry of a judgment against him. Under 17 C.F.R. § 202.5(e), the SEC will not permit to be created "an impression that a decree is being entered or a sanction imposed, when the conduct alleged did not, in fact, occur." The SEC's policy is "not to permit a defendant or respondent to consent to a judgment or order that imposes a sanction while denying the allegations in the complaint . . . ." Pursuant to the Consent and Rule 202.5(e), Musk agreed that he "(i) will not take any action or make or permit to be made any public statement denying, directly or indirectly, any allegation in the complaint or creating the impression that the complaint is without factual basis; (ii) will not make or permit to be made any public

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27 28 statement to the effect that [Musk] does not admit the allegations of the complaint, or that this Consent contains no admission of the allegations, without also stating that [Musk] does not deny the allegations."

- 170. Among the facts alleged by the SEC that Musk admits, or does not deny, are that Musk made multiple materially false statements on August 7, 2018 including the statements that: (1) "Am considering taking Tesla private at \$420. Funding secured"; (2) "Investor support is confirmed. Only reason why this is not certain is that it's contingent on a shareholder vote; (3) "My hope is \*all\* current investors remain with Tesla even if we're private. Would create special purpose fund enabling anyone to stay with Tesla. Already do this with Fidelity's SpaceX [a privately held company for which Musk serves as CEO] investment"; (4) his response to another Twitter user asking, "Could we still invest once private?" by stating "Yes, but liquidity events would be limited to every 6 months or so (like SpaceX)"; (5) his response to a Twitter user who wrote, "Or if you do take Tesla private, please have a provision for retail investors who have held Tesla shares prior to Dec 31, 2016 that those shares will be converted into private shares in the new private company. . . . "by tweeting, "Absolutely. Am super appreciative of Tesla shareholders. Will ensure their prosperity in any scenario"; (6) "Shareholders could either to [sic] at 420 or hold shares & go private"; and (7) "I would like to structure this so that all shareholders have a choice. Either they can stay investors in a private Tesla or they can be bought out at \$420 per share."
- Also among the facts alleged by the SEC that Musk admits or does not deny are that the August 7, 2018 statements set forth in paragraph 170 "were premised on a long series of baseless assumptions and were contrary to facts that Musk knew" so that Musk knew or was reckless in not knowing that his August 7, 2018 statements were false and misleading.
- 172. On September 29, 2018, the SEC filed a Complaint against Tesla alleging that it violated SEC Rule 13a-15 issued pursuant to the Securities Exchange Act by failing to maintain adequate controls and procedures over its SEC filings.
- 173. On September 29, 2018, the SEC announced that it had reached a settlement with both Defendants. In a press release titled "Elon Musk Settles SEC Fraud Charges; Tesla Charged

With and Resolves Securities Law Charge," the SEC described the terms of the settlements as follows:

Washington D.C., Sept. 29, 2018 —

The Securities and Exchange Commission announced today that Elon Musk, CEO and Chairman of Silicon Valley-based Tesla Inc., has agreed to settle the securities fraud charge brought by the SEC against him last week. The SEC also today charged Tesla with failing to have required disclosure controls and procedures relating to Musk's tweets, a charge that Tesla has agreed to settle. The settlements, which are subject to court approval, will result in comprehensive corporate governance and other reforms at Tesla—including Musk's removal as Chairman of the Tesla board—and the payment by Musk and Tesla of financial penalties.

According to the SEC's complaint against him, Musk tweeted on August 7, 2018 that he could take Tesla private at \$420 per share — a substantial premium to its trading price at the time — that funding for the transaction had been secured, and that the only remaining uncertainty was a shareholder vote. The SEC's complaint alleged that, in truth, Musk knew that the potential transaction was uncertain and subject to numerous contingencies. Musk had not discussed specific deal terms, including price, with any potential financing partners, and his statements about the possible transaction lacked an adequate basis in fact. According to the SEC's complaint, Musk's misleading tweets caused Tesla's stock price to jump by over six percent on August 7, and led to significant market disruption.

According to the SEC's complaint against Tesla, despite notifying the market in 2013 that it intended to use Musk's Twitter account as a means of announcing material information about Tesla and encouraging investors to review Musk's tweets, Tesla had no disclosure controls or procedures in place to determine whether Musk's tweets contained information required to be disclosed in Tesla's SEC filings. Nor did it have sufficient processes in place to that Musk's tweets were accurate or complete.

Musk and Tesla have agreed to settle the charges against them without admitting or denying the SEC's allegations. Among other relief, the settlements require that:

- Musk will step down as Tesla's Chairman and be replaced by an independent Chairman. Musk will be ineligible to be re-elected Chairman for three years;
- Tesla will appoint a total of two new independent directors to its board;
- Tesla will establish a new committee of independent directors and put in place additional controls and procedures to oversee Musk's communications;
- Musk and Tesla will each pay a separate \$20 million penalty. The \$40 million in penalties will be distributed to harmed investors under a court-approved process.

"The total package of remedies and relief announced today are specifically designed to address the misconduct at issue by strengthening Tesla's corporate governance and oversight in order to protect investors," said Stephanie Avakian, Co-Director of the SEC's Enforcement Division.

"As a result of the settlement, Elon Musk will no longer be Chairman of Tesla, Tesla's board will adopt important reforms —including an obligation to oversee Musk's communications with investors—and both will pay financial penalties," added Steven Peikin, Co-Director of the SEC's Enforcement Division. "The resolution is intended to prevent further market disruption and harm to Tesla's shareholders."

The SEC's investigation was conducted by Walker Newell, Brent Smyth, and Barrett Atwood and supervised by Steven Buchholz, Erin Schneider, and Jina Choi in the San Francisco Regional Office and Cheryl Crumpton in the SEC's Home Office.

- 174. On October 16, 2018, the United States District Court for the Southern District of New York entered a final judgment against Musk and Tesla. Under the terms of the judgment, Musk admitted that the allegations in the SEC Complaint filed against him are true for certain legal proceedings.
- 175. On November 8, 2018, Tesla announced that Robyn Denholm, a Tesla Board member and technology executive, would become the new Chairman of Tesla.
- 176. On December 28, 2018, Tesla also announced that as a result of the settlement with the SEC, that Larry Ellison, and Kathleen Wilson-Thompson would be joining Tesla's Board.
- 177. The SEC's quick and deliberate actions against Musk and Tesla adds to the inference that Musk acted with scienter. Further, the fact that Musk was required to step down as Chairman of Tesla as a direct result of his false and misleading statements further underscores Musk's scienter.

### 5. <u>Musk's scienter is imputed to Tesla.</u>

- 178. Musk, as Chief Executive Officer and Chairman of the Board, was the face of and spokesman for Tesla.
- 179. Tesla used social media and specifically Musk's Twitter account to convey corporate news.

- 180. When Musk tweeted information about Tesla on Twitter, he did so with apparent authority on behalf of Tesla. This placed Musk in a position of trust and confidence and controlled the level of oversight of his handling of the business.
  - 181. Therefore, all statements made by Musk as well as his scienter are imputed to Tesla.
- 182. Musk's statements and scienter are also imputed to Tesla under the doctrine of *respondeat superior* and principles of common law agency.

#### C. <u>Presumption of Reliance; Fraud-On-The-Market</u>

- 183. At all relevant times, the market for Tesla's securities was an efficient market for the following reasons, among others:
  - (a) Tesla's securities met the requirements for listing, and were listed and actively traded on the NASDAQ, a highly efficient market;
  - (b) During the Class Period, Tesla's securities were actively traded, demonstrating a strong presumption of an efficient market;
  - (c) As a regulated issuer, Tesla filed with the SEC periodic public reports;
  - (d) Tesla regularly communicated with public investors via established market communication mechanisms;
  - (e) Tesla was followed by securities analysts employed by major brokerage firms who wrote reports that were distributed to the sales force and certain customers of brokerage firms during the Class Period. Each of these reports was publicly available and entered the public marketplace; and
  - (f) Unexpected material news about Tesla was rapidly reflected in and incorporated into Tesla's stock and option prices during the Class Period.
- 184. The market for Tesla securities was open, well developed and efficient at all relevant times. As a result of Musk's and Tesla's materially false and misleading statements, Tesla securities traded at artificial prices during the Class Period. Plaintiff and other Class members purchased and/or sold Tesla securities relying upon the integrity of the market prices of Tesla securities and market information relating to Tesla, and were damaged as a result.

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185. The current market prices of Tesla options, as well as all United States exchangelisted equity options, are based in part on the current price of the underlying stock. As the underlying stock price moves closer to or further away from an option's strike price, the value of that particular option is affected because the likelihood of that option being exercised increases or decreases. As a company's stock price reflects all public information concerning that company and the markets utilize the current market price of a company's stock to calculate the prices for equity options, all public information concerning a stock is incorporated into the price of a company's equity options as well.

- 186. As a result of the foregoing, the market for Tesla's securities promptly digested current information regarding Tesla from all publicly available sources and reflected such information in the price. Under these circumstances, all purchasers and sellers of Tesla's securities during the Class Period relied on Tesla and Musk's material misrepresentations and omissions when making their purchases or sales of Tesla's securities at market prices.
- 187. At the time of Tesla and Musk's misrepresentations and omissions, Plaintiff and other Class members were ignorant of their falsity, and believed them to be true. Had Plaintiff and the other Class members and the marketplace known the truth regarding the proposed going-private transaction and its funding, which were not disclosed by Tesla or Musk, Plaintiff and other Class members would not have purchased or sold their Tesla securities, or, if they had purchased or sold such securities during the Class Period, they would not have done so at the artificial prices that they paid or received.

#### D. **Loss Causation and Economic Loss**

When Musk made the "funding secured" tweet on August 7, 2018, and continued to 188. make misrepresentations regarding the proposed going-private transaction as alleged herein, he damaged virtually every individual and/or entity trading Tesla securities during the Class Period.

#### 1. Common Stock

189. Musk's "funding secured" tweet on August 7, 2018 and subsequent misrepresentations materially affected the market for Tesla securities. The price of Tesla's stock increased following the initial "funding secured" tweet, and then rose and fell in response to further

misrepresentations by Musk, other corporate statements, and reports by analysts and news media. Tesla's stock price dropped substantially once it was confirmed that funding for the go-private transaction had in fact never been "secured" and the proposed \$420 price had never been agreed. The following chart illustrates the movement of Tesla's stock price during August 2018:



190. Musk's tweets on August 7, 2018 caused a massive increase in the price of Tesla's stock. From an opening price of \$343.84 per share, Tesla's stock rose to an intraday high of \$387.46 and closed at \$379.57. Over 30 million shares were traded that day, or more than twice the daily average volume for Tesla stock over the previous 90 days.

191. On August 8, 2018, Tesla's stock price declined significantly. Contrary to what Musk had said on August 7, 2018, the press release from Tesla's Board did not state that funding for a going-private transaction had been "secured." From a closing price of \$379.57 the day earlier, Tesla's stock closed at \$370.34 per share on August 8, 2018. Volume for the stock was unusually heavy with over 24.5 million shares being traded.

192. On August 9, 2018, Tesla's stock price continued to decline. The previous day, after the market closed, the *Wall Street Journal* reported that the SEC was investigating Musk and Tesla over Musk's "funding secured" tweet. During the course of the day, Tesla's stock price declined by

almost 5% to close at \$352.45. Again, volume was unusually high with over 17 million shares traded.

- 193. On August 13, 2018, following Musk's blog post dated August 13, 2018, Tesla's stock price rose during pre-market trading to open at \$361.13 per share compared to its adjusted closing price from the day before of \$356.41 per share. Tesla's stock closed at \$356.41 per share with over 10.4 million shares traded during the day.
- 194. On August 14, 2018, Tesla's stock price continued to drop in response to Tesla's statement that the company had formed a special committee in connection with the going-private transaction and reports that neither Musk not Tesla had in fact retained the advisors that Musk had mentioned the day before. Tesla's stock closed at \$347.64 per share.
- 195. On August 15, 2018, Tesla's stock price continued to decline. During the course of the day, multiple news sources reported that the SEC had issued formal subpoenas to Musk and Tesla. Tesla's stock closed at \$338.69 per share.
- 196. On August 17, 2018, Tesla's stock closed at \$305.50 per share, which represented a decline of \$29.95 per share or almost 9% from the previous day. The decline was caused by *The New York Times* report on Musk which was published online after-market hours on August 16, 2018 and in print on August 17, 2018. The report confirmed to investors that Musk's "funding secured" tweet had in fact been false when made and that, in reality, there was no definitive agreement to take Tesla private in place, or even close to being finalized.
- 197. Musk's and Tesla's false and misleading statements artificially inflated the price of Tesla's common stock. By stating that he had "secured" funding to take Tesla private at \$420, Musk led the public to believe that investors would receive \$420 per share when the transaction was completed. As the truth concerning Musk's and Tesla's statements was revealed, the market started to doubt whether Musk had truly secured funding and if the company was truly going private. This, in turn, caused the price of Tesla's stock to decline as the artificial inflation began to dissipate.
- 198. Investors who purchased Tesla shares at inflated prices following Musk's August 7, 2018 tweet suffered losses as the fraud was revealed and Tesla's stock price declined.

- 199. Similarly, an investor who was betting against Tesla and was "short" its stock before August 7, 2018 also sustained losses in connection with Musk's and Tesla's false and misleading statements.
- 200. If an investor expects that the price of a company's stock will decrease in the future, an investor may open a short investment position in the company's common stock. To short a company's stock, an investor will borrow a share of the company's common stock from another party and sell it at the then current market price. The investor is obligated to replace the borrowed share in the future and may pay interest on the borrowed share to the lending party.
- 201. If the investor wishes to close his short stock position, the investor would "buy to cover" by purchasing a share of the company's common stock at the prevailing market price. If the stock price has decreased since the investor sold short the borrowed share, the investor would profit because he sold the share for a price greater than he paid to replace the borrowed share. If, however, the stock priced has increased, the investor would incur a loss as it would cost the investor more to replace the share than it received when selling the borrowed share.
- 202. Many short investors were required to "cover" their short positions when Musk tweeted that he had "secured" funding to take Tesla private at \$420 per share. Any short investor that "covered" in the wake of Musk's tweet suffered significant damages as a result of having to purchase shares at artificially inflated prices.

#### 2. Options

- 203. Option traders also sustained significant damages as a result of Musk's and Tesla's false and misleading statements.
- 204. An option contract is a type of security that provides an investor a right or obligation to buy or sell a specific security. For United States exchanged-listed options on publicly-traded stock, one option contract equals the right to buy or sell 100 shares of the underlying stock. Listed options are readily available on most listed securities. All exchange-listed equity options in the United States will denote: (i) the type of security underlying the option contract (*i.e.*, Tesla common stock); (ii) the price at which the underlying security may be bought or sold when the option is

exercised (the "strike price"); and (iii) the date by which the option must be exercised (the "expiration date").

205. There are two basic types of equity options: call options and put options. Call options give the holder the right, but not the obligation, to buy shares. The primary motivation of the call buyer is to realize financial reward from an increase in price of the underlying security. Accordingly, a call option holder can force the seller or the "writer" of a call option contract to sell shares of the underlying stock at the strike price, even if the stock is trading at a greater price.

206. Put options, on the other hand, give the holder the right, but not the obligation, to sell shares at the strike price. The motivation for the put holder is to make money when the stock falls in value. Accordingly, a put option holder can force the writer of a put option contract to buy shares of the underlying stock at the strike price, even if the stock is trading for a lesser price.

207. The value of a put or call option is dependent upon several factors, including: (i) the price of the underlying stock; (ii) the strike price; (iii) the time to expiration; and (iv) the implied volatility of the option.

208. In addition to artificially inflating the price of Tesla's stock, Musk's and Tesla's false and misleading statements also created extreme volatility in the market for Tesla's securities as the public tried to determine whether Tesla would in fact go private and, if so, at what price. Implied volatility represents the expected volatility of a stock over the life of an option. When implied volatility increases, the price of an option contract increases accordingly. The following chart illustrates the changes in volatility during August 2018 with the implied volatility for options expiring in the next 10 days (blue) exhibiting the most significant volatility compared to options expiring in the next 30 days (green) and year (black):

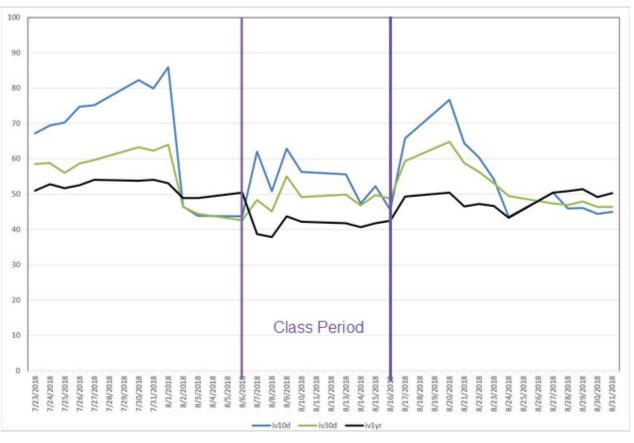
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209. The abrupt increase in price, volume, and volatility in the market for Tesla securities, which was caused by Musk's and Tesla's false and misleading statements, resulted in significant damages for investors who sold or purchased options during the Class Period, depending on the particular option contracts held.

\* \* \*

- 210. As a result of their purchases and sales of Tesla securities during the Class Period, Plaintiff and the other Class members suffered economic loss, *i.e.*, damages, under the federal securities laws. Musk's and Tesla's false and misleading statements caused Tesla's stock, options, and other securities to trade at artificial levels throughout the Class Period. By misleading investors about the going-private transaction and, in particular, that funding had not in fact been "secured," Musk and Tesla deceived investors. As the truth was revealed to investors, the prices of Tesla securities were affected significantly, causing economic loss to investors who had purchased or sold Tesla securities during the Class Period.
- 211. As described above, the changes in the price of Tesla's stock, options, and other securities after the truth about the going-private transaction and its funding were disclosed were the

direct result of the nature and extent of Musk's and Tesla's fraudulent misrepresentations being revealed to investors and the market. The timing and magnitude of the price changes in Tesla's securities negate any inference that the losses suffered by Plaintiff and the other Class members were caused by changed market conditions, macroeconomic or industry factors, or company-specific facts unrelated to Musk's and Tesla's fraudulent conduct.

#### E. Safe Harbor Does Not Apply

- 212. The statutory safe harbor provided for forward-looking statements under certain circumstances does not apply to any of the material misrepresentations and omissions alleged in this Complaint. None of the misrepresentations or omissions by Tesla and Musk involved forward-looking statements nor were they accompanied by meaningful cautionary statements identifying important factors that could cause actual results to differ materially from those in any purportedly forward-looking statements.
- 213. By virtue of the foregoing, Tesla and Musk have violated Section 10(b) of the Securities Exchange Act of 1934, 15 U.S.C. § 78j and Rule 10b-5, 17 C.F.R. § 240.10b-5, promulgated thereunder.

#### VII. COUNT II: VIOLATION OF SECTION 20(a) AGAINST THE BOARD

- 214. Plaintiff repeats and realleges each and every allegation contained above as if fully set forth herein.
- 215. As members of Tesla's Board, Defendants Buss, Denholm, Ehrenpreis, Gracias, Murdoch, Kimbal, and Rice acted as controlling persons of Tesla within the meaning of Section 20(a) of the Securities Exchange Act of 1934.
- 216. By virtue of their high-level positions, agency, ownership and contractual rights, and participation in and/or awareness of Tesla's operations and/or intimate knowledge of the false information and disseminated to the investing public, the Board had the power to influence and control, and did influence and control, directly or indirectly, the decision-making of Tesla, including the content and dissemination of the various statements that Plaintiff contends are false and misleading. The Board was provided with or had unlimited access to Tesla's reports, press releases, public filings and other statements alleged by Plaintiff to have been misleading prior to and/or

shortly after these statements were issued and had the ability to prevent the issuance of the statements or to cause the statements to be corrected.

- 217. At all relevant times herein, the Board was responsible for overseeing management to ensure that Tesla operated in an effective, efficient, and ethical manner. This included ensuring that public communications to stockholders were accurate and not misleading.
- 218. Tesla identified Musk's Twitter account as an official channel of communication for the company. Accordingly, the Board had authority over and/or controlled statements made by Musk through his Twitter account. For example, Defendant Gracias, Tesla's lead independent director, contacted Musk after August 7, 2018 and ordered him to refrain from tweeting about the potential privatization transaction unless he previously discussed it with the Board. Musk did not publish a tweet about the transaction from August 8, 2018 to August 24, 2018. Similarly, the Board (except Kimbal) also issued a press release discussing the going-private transaction on August 8, 2018.
- 219. As set forth above, Musk and Tesla each violated Section 10(b) and Rule 10b-5 by their acts and omissions as alleged in this Complaint and the Class was damaged thereby.
- 220. By virtue of their positions as controlling persons, the Board is liable pursuant to Section 20(a) of the Securities Exchange Act of 1934.

#### VIII. PRAYER FOR RELIEF

WHEREFORE, Plaintiff prays for relief and judgment as follows:

- (a) Determining that this action is a proper class action, certifying Plaintiff as class representative under Federal Rule of Civil Procedure 23 and Plaintiff's counsel as class counsel;
- (b) Awarding compensatory damages in favor of Plaintiff and the other Class members against all Defendants, jointly and severally, for all damages sustained as a result of the Defendants' wrongdoing, in an amount to be proven at trial, including interest thereon;
- (c) Awarding Plaintiff and the Class their reasonable costs and expenses incurred in this action, including counsel fees and expert fees;

## Granting extraordinary equitable and/or injunctive relief as permitted by law; (d) 1 2 and 3 Such other and further relief as the Court may deem just and proper. (e) 4 IX. **JURY TRIAL DEMANDED** 5 Plaintiff hereby demands a jury trial. 6 Dated: January 16, 2019 Respectfully submitted, 7 LEVI & KORSINSKY, LLP 8 /s/ Adam M. Apton 9 Adam M. Apton (SBN 316506) Adam C. McCall (SBN 302130) 10 44 Montgomery Street, Suite 650 San Francisco, California 94104 11 Telephone: (415) 291-2420 Facsimile: (415) 484-1294 12 Email: aapton@zlk.com 13 Email: amccall@zlk.com 14 -and-Nicholas I. Porritt (admitted pro hac vice) 15 Alexander A. Krot, III (admitted pro hac vice) LEVI & KORSINSKY, LLP 16 1101 30th Street N.W., Suite 115 17 Washington, D.C. 20007 (202) 524-4290 Tel: 18 (202) 333-2121 Fax: Email: nporritt@zlk.com 19 Email: akrot@zlk.com 20 -and-21 Eduard Korsinsky (pro hac vice to be submitted) Joseph Levi (pro hac vice to be submitted) 22 LEVI & KORSINSKY, LLP 55 Broadway, 10th Floor 23 New York, New York 10006 Tel: (212) 363-7500 24 (212) 363-7171 Fax: 25 Email: ek@zlk.com Email: jlevi@zlk.com 26 Attorneys for Lead Plaintiff Glen Littleton 27 and Lead Counsel for the Class 28 58

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## EXHIBIT HH

## EXCERPTS FROM THE DEPOSITION OF STEVEN HESTON TAKEN MARCH 16, 2022

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           UNITED STATES DISTRICT COURT
          FOR THE NORTHERN DISTRICT OF CALIFORNIA
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                              Case No. 18-cv-04856-EMC
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             TESLA, INC., SECURITIES
    IN RE:
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    LITIGATION
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             DEPOSITION UNDER ORAL EXAMINATION OF:
                           STEVEN HESTON
15
                          March 16, 2022
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                     JENNIFER L. WIELAGE, CCR, RPR, CRR
     REPORTED BY:
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    JOB # 12105
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1 2 THE VIDEOGRAPHER: We are now on the 3 Today's date is March 16, 2022, and the time 4 is 10:11 a.m. eastern time zone. 5 This is the recorded video deposition 6 of Steven Heston in the matter of In Re: Tesla, Inc. 7 Securities Litigation in the United States District 8 Court, Northern District of California, Case No. 9 18 - CV - 04865 (EMC). 10 My name is David Ambrogi from Everest 11 Court Reporting and I am the video specialist. The 12 court reporter today is Jennifer Wielage, also from 13 Everest Court Reporting. All counsel appearing today 14 will be noted on the stenographic record. 15 Will the court reporter please ware 16 in the witness? 17 STEVEN L. HESTON, Levi & Korsinsky, Washington, D.C., 18 having been first duly sworn according to law, 19 testifies as follows: 20 EXAMINATION BY MR. ROSSMAN: 21 Ο. Good morning, Professor Heston. 22 Andrew Rossman. I'm going to take your deposition 23 today. 24 Do you prefer Professor Heston, 25 Dr. Heston or something else?

1 Let me find this here. Α. What page, 2 please? 3 55. So you write in Paragraph 163: 0. 4 In general, there are two ways to calculate the 5 impact on traded options. One possibility is to 6 calculate a unique but-for price and then compare 7 that to the transacted price. 8 Yes. Α. 9 And the other is to calculate Ο. Okav. 10 an impact quantum. I'll just pause there for a 11 second. Okay? 12 You did not calculate a unique 13 but-for price and then compare it to transacted 14 prices, correct? 15 I did not opine that. Of course I Α. 16 did various calculations in the course of developing 17 my methodology, and I -- but I did not conclude that 18 that was the best approach. So I favored the second 19 approach. 20 So the approach that you used of 0. 21 calculating an impact quantum was not comparing -- am 22 I correct, sir, it was not comparing actual 23 transacted prices to theoretical but-for prices? 24 Α. That's correct. 25 Okay. So your analysis, using an Q.

25

- Ο. And not for put or call options, but for an at-the-money straddle?
- 23 A straddle is, by definition, a put Α. 24 and a call option.
  - This was a constructed straddle, a Ο.

1 consistently across all options and then we can 2 uniform consist -- uniformly, consistently and 3 reliably calculate the price changes in a coherent 4 way for all these options. 5 0. Okay. So you didn't have transacted 6 prices that you could actually rely on to establish 7 the starting point in your analysis of the 8 at-the-money straddle, which is where crossed at one 9 minute before 12:48, right? 10 I had the bid and ask quotes and I A. 11 used the average or midpoint. 12 So the answer to my question is you 0. 13 didn't have actual transacted prices you can look at 14 for that starting point, right? 15 That's correct. A. 16 I'm going to object to MR. PORRITT: 17 form. 18 BY MR. ROSSMAN: 19 All right. Let's turn our attention, Ο. 20 Doctor, to Paragraph 165, okay, and this is the 21 paragraph where you explain how you calculated the 22 impact quantum, and it seems that there are three 23 components -- let's take a look at each of them. 24 165a, you say: First I find the

price of the ATM or at-the-money forward straddle

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1
     direct is to say I calculate the price or the
 2
     observed value of the straddle -- in order to do
 3
     that, you don't need to make any theoretical
 4
     assumption at all. You just need to calculate the
 5
     value of the straddle.
6
                    You refer to it as actual -- we call
7
     you actual applied volatility, but it's actually a
8
     calculation, right? You're not observing a reported
9
     volatility measure in the marketplace, right?
10
                    I'm observing the actual quoted price
            A.
11
     of a portfolio of options, which is exactly
12
     at-the-money forward, and then I'm inverting that
13
     actual price to find what volatility would match that
14
     price.
15
                    So it was a calculation of
            0.
16
     volatility, correct?
17
            A.
                    In the same sense that converting
18
     feet to inches is a calculation, yes.
19
                    Well, you're not taking it from
            0.
20
     Bloomberg or some data source? You're actually
21
     calculating it based on stock prices, right?
22
                    Yes, based on the stock -- the actual
            A.
23
     observed stock and option quotes, I am -- I'm doing
24
     the calculation with those actual quotes.
25
                           And then to use the implied
            Q.
                    Okav.
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that is not wild in dollars and cents can appear wild in terms of implied volatility. So it depends what you mean by "wild."

- Q. Well, there's a -- let me ask the question this way, Professor: If there's that large a spread between the traded prices of options, particularly options that are deep in the money or deep out of the money, your assumption that you use -- that you can just rely on a theoretical price, what do you do to track that against actual traded prices to see if it predicts what you expect?

  MR. PORRITT: I'm going to object to the form of the question.
- 14 BY MR. ROSSMAN:
  - Q. Do you understand what I'm asking you, Professor? I'm happy to reform the question if it will help you.
  - A. Let me -- let me take a stab and we can break it down if you want. What I do -- and the question started with what do I do and I'm not sure what you mean by "track," but what I do to avoid the -- these problems is I use options that have the most value and you can see, from my previous graphs, that the at-the-money options have the most intrinsic value of all options.

1 For example, they might be worth \$40. 2 They have -- they tend to have the narrowest bid-ask 3 spreads and the highest volume, and that's important 4 because you -- I think you used the word "price" or 5 "transactions," we're going off bid-ask guotes and we 6 want to avoid problems of stale prices and --7 right -- time deviations between the stock and the 8 option quotes. 9 So by using at-the-money options, I'm 10 getting a thick market where either that option or 11 similar option has probably traded recently at a --12 and the stock price is very close to contemporaneous. 13 It has a small dollar spread and the option is 14 also -- also has a high vega or a high sensitivity to 15 volatility where as the tail options aren't worth 16 much no matter what volatility does. 17 So by combining these factors, using 18 straddles or liquid valuable options of small 19 spreads, I'm able to minimize the effect of this 20 noise on my conclusions. 21 0. So let's take this one step at a 22 You understand that the class consists Okay? 23 of all option holders that traded during the Class 24 Period, whether they're in the money, out of the 25 money or anywhere near the money, right?

1 then trading price of 341.99, right, so, in other 2 words, not at-the-money strikes, if you actually 3 calculated it and plotted it using whatever data you 4 wanted to use, you would have -- you would see a 5 curve that's different than a flat line, right? 6 First you asked me if I wanted Α. Wait. 7 to do something and then you asked me what I would 8 So let me answer those two questions see. 9 separately. 10 If I wanted to implement a model, I 11 would implement it for a purpose. I would have a 12 criterion or a metric of performance to describe 13 something. 14 In my particular implementation, I'm 15 trying to find the difference between option values 16 under two scenarios. It could be on one day or 17 another or it could be on one day and under a but-for 18 scenario, and I would be concerned with calculating 19 the difference between those in a reliable dollar 20 sense. And that's what I do because I think that my 21 method of implementation is not only reasonable using 22 the Black-Scholes Formula, but is quite reliable and 23 dependable by doing it the way. 24 And what you've asked is: If I graph 25 the levels in exactly the way Seru did and calculate

1 error and levels on the Black-Scholes model compared 2 to another model. 3 And you didn't, in fact, compare your 4 use of Black-Scholes model to any other model in your 5 reports, right? 6 Well, I would say that the 7 Black-Scholes model with a different volatility input 8 is, in fact, a different model because it gives an 9 entirely different curve. 10 So to answer my question, you didn't 0. 11 use anything other than Black-Scholes, true? 12 Again, in preliminary work, I **A**. 13 confirmed that a model -- a model different from 14 Black-Scholes could improve upon the levels exactly 15 as this found, but was unnecessary because it did not 16 significantly depart in terms of its predictions for 17 changes. And then I -- rather than develop that, I looked in the literature and I found that Dumas, 18 19 Fleming and Whaley did a comprehensive analysis which 20 showed the same thing, that models which are very 21 good at levels, can be very bad in predicting changes 22 or out-of-sample changes in observed option prices. 23 So I -- I realized I had merely confirmed what is 24 already influentially documented in the literature 25 and, therefore, I confined my remaining sensitivity

1	analysis to the Black-Scholes Formula with different		
2	volatility inputs.		
3	Q. So apart from changing the volatility		
4	inputs to the Black-Scholes model, it's true that you		
5	didn't use Professor Subrahmanyam, Professor Bester's		
6	or any other alternative model besides Black-Scholes,		
7	correct?		
8	A. Based on the Dumas, Fleming and		
9	Whaley findings and my familiarity with using a		
10	variety of models, which are published, I decided		
11	that my implementation of the Black-Scholes model is		
12	the most reasonable, reliable and robust procedure to		
13	use.		
14	Q. Okay. But you have no you have no		
15	ability to calibrate or check the model to tell me by		
16	how much your model is off?		
17	A. I have plenty of ability, and I've		
18	published many papers and programmed up many option		
19	prices and then I put plausible and different inputs		
20	in them to measure the option prices or the changes		
21	in prices.		
22	Indeed, if you look at my 1993,		
23	stochastic volatility paper, I have exhibited that		
24	and shown that there are differences in the level of		
25	prices.		

1	If I wanted to, I could measure the
2	change but my familiarity with those models and my
3	reading of the literature shows that those models
4	don't have large differences in the changes and when
5	I say "large" I did a cursory calculation showing a
6	90% correlation between the errors from one model and
7	the errors from another. And it's just as easy to
8	produce that by using the Black-Scholes with
9	different volatilities.
10	So I went ahead and ran with the
11	Black-Scholes model because it's much it's much
12	more accepted. It's simpler. It's more robust and
13	it's more reliable by requiring fewer inputs, being
14	more parsimonious and simple and, therefore, I think,
15	really the robustness is it avoids the pitfalls of
16	all these complications, giving me more transparent
17	and reliable results.
18	Q. You knew, Professor Heston, that the
19	Black-Scholes model that you relied on would be
20	erroneous in certain respects, right?
21	A. I knew that all models are wrong.
22	Q. So despite the fact that you knew
23	that the model that you used was wrong, you're not in
24	the position to tell me just how wrong it was
25	MR. PORRITT: I'm going to object to

1 That's a totally argumentative precedent. form. 2 BY MR. ROSSMAN: 3 It's a serious question. You can't 0. 4 give me an error rate or any quantification of the 5 amount of error in your model; isn't that true? 6 Actually, I produced graphs. Let me **A**. 7 look in my report, please. And a recurrent theme in 8 our dialogue has been that when you talk about error, 9 you need a criterion of error. For example, the 10 papers you've pointed to involve the levels and the 11 particular application of my methodology would 12 involve changes in values, and I don't know under 13 what scenarios or on what days one might wish to 14 investigate these, so, right, there are many 15 implementations of my model and I can't anticipate 16 all of them and provide an error because it does 17 depend on which days or what four scenarios you 18 choose. 19 But let me look at my supplemental 20 report to see. Yeah, so, in fact, I think the 21 statement you made is more relevant to Seru who gave 22 one number, and there's a saying that a man with one 23 watch knows what time it is, but a man with two 24 watches never does. And my retort to that is that a 25 man with two watches has a margin of error. He knows

```
1
     how off he is if his watches disagree.
2
                    So I've widely in my report have
3
     provided both a bid and an ask so that one can
4
     visually compare the variation within the model
5
     across different strike prices with the noise within
6
     the options to get an idea of how sensitive the
7
     results are.
8
                    So my figures one and two --
9
                    Well, you're referring to --
            0.
10
                    In the supplemental report in
            A.
11
     paragraph -- yeah, Exhibit 269 -- 369.
12
            Q.
                    Page 11.
13
            Α.
                    It's 369 on page 11.
14
                    MR. ROSSMAN: If we can pull up
15
     Exhibit 369 at page 11, please. Thank you. Go
16
     ahead, Professor.
17
            Α.
                    So I have presented calculations
18
     using bids and asks to show the sensitivity of my
19
     results, and at the bottom of page 9 there, you see
20
     the due Dumas, Fleming and Whaley citation.
21
                    So that SSRN working paper version,
22
     you can download for free, that one says: Simpler is
23
     better. I believe it says that, saying that the
24
     simpler models, including -- or especially the
25
     Black-Scholes model can be superior for prediction of
```

1	changes in value if two or more complex models, such
2	as Seru's implementation, which attempt to fit all
3	option prices in sample.
4	Q. Professor I'm sorry, did you not
5	finish your answer?
6	A. No, I didn't finish my answer. And
7	so following that logic, I used a simple model, and
8	then I presented both bids and ask conclusions from
9	my model in Figures 1, 2, 3 and 4, along with Seru's
10	graph, which gave only one number with no indication
11	of the error.
12	Q. We may have indications to talk about
13	Figures 1, 2, 3 and 4, but apart from those figures
14	with bid-ask numbers, did you perform any calculation
15	that shows the extent of error in your model?
16	MR. PORRITT: Object to form.
17	A. I let me say I noted that the
18	bid-ask spread on the stock price was sometimes
19	literally 2 cents and the bid-ask spread on the
20	at-the-money straddles was rather small.
21	Again, I don't know the exact number
22	because it's in percentage terms and doesn't
23	translate to dollars. So that, by diversifying
24	across those options, I was able to minimize noise
25	and the effect of the bid-ask spread. So so it's

```
1
     pretty obvious what -- the small bid-ask spread on
2
     the stock would have minimal effect on the option
3
     conclusions.
4
                    Do you understand my question,
            0.
5
     Professor?
6
                    Your question is: Did I compute an
            A.
7
     error? And the answer is yes, I graphed it in
8
     several graphs by showing --
9
                    No, that wasn't my question.
            0.
10
                    MR. PORRITT: No, no, let him
11
     finish his answer, Andy.
12
                    MR. ROSSMAN: With respect, he's
13
     going to have to try to do better to answer my
14
     questions or we're going to be here for --
15
                    MR. PORRITT: Well, with respect, you
16
     can ask better questions. Your questions are all
17
     over the place, so you're going to explain to give
18
     context to your question.
19
                    MR. ROSSMAN: No. With respect, I
20
     don't really want to argue with you about the quality
21
     of my questions, okay? I'll take my own counsel on
22
     that. I'm going to ask a new question of the witness
23
     and I'm going to try it this way, Professor. It's
24
     getting into the afternoon. I've been quite as
25
     polite and permissive as I can be in allowing you to
```

```
1
                                   I haven't -- let's qo
                    MR. ROSSMAN:
 2
     back because I don't think we have a question pending
 3
     at this point because we were having a colloquy over
 4
     whether the witness's prior answer actually responded
 5
     to my question.
 6
                    So I'd like to withdraw, if there is
 7
     a pending question, I'd like to withdraw it and ask
 8
     you a very precise question.
 9
                    THE DEPONENT:
                                    Okav.
10
     BY MR. ROSSMAN:
11
                    Apart from Figures 1, 2, 3 and 4, did
            0.
12
     you perform any other calculation of the error rate
13
     of your model, yes or no?
14
                    MR. PORRITT: I'm going to object to
15
     form.
16
            A.
                    All right. Notwithstanding the
17
     objection, there is a Figure 5, which also exhibits
18
     the variation of noise caused by microstructure
19
     biases in Seru's implementation versus mine.
20
                    I looked at the correlations between
21
     the predictions of my model under different
22
     parameterizations. That is, I used one volatility
23
     input and another volatility input or one stock price
24
     input and another stock price input and shocked them
25
     by the same amount. So I raised volatility by
```

1	10 percent to create
2	Q. Where do I find that, Professor, so I
3	can follow along with you?
4	A. All right. So I took one option
5	curve
6	Q. I mean where in the report? I just
7	want to follow the same
8	A. Okay. I didn't report these
9	diagnostics because the error rate depends on the
10	application and the assumptions.
11	If you told me the truth if you
12	gave me a thousand observations where God told me
13	what the price change should have been and then you
14	asked me to calculate it, I could calculate the
15	discrepancy by some metric between my predictions and
16	the truth.
17	But of course we don't observe that.
18	We merely observe actual option prices and until you
19	tell me the truth or the scenario under which you
20	want me to calculate an error, I can't even come up
21	with a definition of error to calculate.
22	So I don't think I've done that
23	because I think what you've asked is ambiguous.
24	Q. So let me see if we can do this as
25	crisply as possible.

```
1
                    You have performed some other
2
     diagnostics that are not contained in your reports;
3
     is that true?
4
                    MR. PORRITT: Object to form. That
5
     was a mistake what you just said.
6
                    I have calculated a lot of option
            A.
7
     prices and a lot of option price changes and found
8
     that they -- that the results in the report are very
9
     representative of my reasonableness implementations.
10
                    My simple question to you, Professor,
            0.
11
     is: Are there diagnostic calculations that you
12
     performed that you did not put in your reports or in
13
     any appendices that have been provided?
14
                    Every time I hit refresh on the
            Α.
15
     spreadsheet, numbers changed, and I couldn't possibly
16
     include them all. But the -- my conclusions, my
17
     opinion is fairly reflected by the contents of the
18
     report.
19
                    Apart from Exhibits 1, 2, 3, 4 and 5,
            Ο.
20
     are there any other diagnostics or calculations and
21
     error rate in your --
22
                          Let me look, please.
            Α.
                    Yes.
23
     look in my report. If you look at Table 6 --
24
                    Are you in the supplemental or the
            Ο.
25
     original?
```

1	A. It's calculated using, let's see
2	yes, using the procedure I described and it shows a
3	remarkable coherency consistency when computed on
4	different days using different options.
5	Q. But it doesn't compare your model to
6	any other model, nor does it indicate a margin of
7	error for your model?
8	A. I think well, actually, again,
9	there you go using that term "margin of error."
10	Margin of error involves a null hypothesis and a
11	statistical estimate of the discrepancies assuming
12	that is true.
13	Now, if you assume a different model
14	is true, you can compute a discrepancy between my
15	results and a different model. But you would have to
16	decide on that different model, and in my opinion, my
17	model is the most reasonable and robust one to use,
18	so I can't even calculate your so-called margin of
19	error under a different model until you tell me what
20	model to use, and I don't know why I would use a
21	different model if I think that my model is the most
22	reasonable.
23	Q. Well
24	MR. PORRITT: Andrew, can we take a
25	break? We've been going

1 MR. PORRITT: Object to form. 2 Α. I exasperatedly pointed out that my 3 conclusions don't require that, and that I used the 4 average for exactly the reason that we're concerned 5 about, price points and the arbitrariness of using 6 either put or call. So I compromised and used the 7 average just as I and Seru used the average of 8 bid-ask quotes to diversify and take the most neutral 9 number for purpose of calibration. 10 That statement in Paragraph 128 of Ο. 11 your opening report, put-call parity holds for ATM 12 options, is simply not accurate for all Tesla 13 options, correct? 14 It is a theorem in the Black-Scholes Α. 15 Formula, and that is the context in which I was 16 writing because I was explaining how I used 17 Black-Scholes Formula to extract it. 18 If you want to make a big legal case 19 about refusing to explicitly write out a 20 parenthetical clause in a clear context of the 21 Black-Scholes Formula, I don't know what to tell you. 22 And the after-running forward 23 straddle prices that you used to calculate implied 24 volatility aren't some abstract assumed formula.

They're Tesla prices that you're

1	using in your model, right?
2	A. Well, they are weighted averages or
3	combinations of observed quoted prices, yes.
4	Q. And it's hardly surprising to find
5	evidence that put-call parity does not hold for
6	American options.
7	In fact, you know, perhaps leading
8	authority on options holds that opinion, right?
9	A. Are you saying that it's not
10	surprising because American options have an early
11	exercise premium?
12	Q. It's it is accurate to say that
13	put-call parity does not hold for American options.
14	Wouldn't you agree?
15	A. Theoretically there are due to
16	early exercise, an American put option might be more
17	valuable than a European put option, and when
18	calibrating numerically, I find that magnitude is on
19	the order of .1%.
20	Q. And Tesla options were American
21	options, right?
22	A. Tesla options are American options
23	that are not currently and the stock is not
24	currently paying dividends, yes.
25	O. And you would agree that John Hull is

And you would agree that John Hull is

Q.

```
1
                    First, let me ask you a question:
2
     Why is that relevant? Why is the bid-ask bound a
3
     relevant boundary to determine whether or not your
4
     analysis is -- is accurate?
 5
            A.
                    Well, I'm going to -- to rephrase
6
     that in a slightly broader form so I can answer it.
7
                    I'd prefer you answer my question.
            0.
8
                    Your question is why is it relevant
            A.
9
     to do the bid-ask?
10
                    Why is it relevant -- why is the
            0.
11
     bid-ask boundary a relevant boundary to determine
12
     whether or not your analysis is accurate?
13
            A.
                    Well, because Seru proposed an
14
     alternative quantum impact type of procedure -- not
15
     quantum impact -- an alternative procedure to measure
16
     change in value between one scenario and the but-for
17
     scenario, and I wanted to assess whether Seru's
18
     procedure was possibly better or even meaningfully
19
     different from mine.
20
                    In some sense, it makes sense in the
21
     same way that Rubinstein's implied binomial tree
22
     makes sense. Let's calibrate the curve exactly.
23
     Let's match that smile. Let's match every wiggle,
24
     nook and cranny, as if the option service were an
25
     English Muffin.
```

1 And so I wanted to find out whether 2 my numbers were economically different from Seru's. 3 So when I replicated Seru's graph, 4 using my method, and then making -- doing data sensitivity analysis by using the bid and the ask, I 5 6 saw that the general pattern of our graphs is 7 strikingly similar. 8 So if you look at my figures and his 9 figures, they're very the same, and the width of the 10 bid and the ask show that Seru could have produced 11 widely different numbers which usually overlap my 12 numbers by a different choice of data, in 13 particular -- now, this is mathematical, but I think 14 it's important to interpret these calculations. 15 At-the-money options are extremely sensitive 16 volatility. So it's not just that they have small 17 bid-ask spread and they're valuable so a very small 18 percentage of bid-ask spread. They're also very 19 sensitive to volatility because they have roughly 50 20 percent probability of being exercised or not. In 21 contrast, out of the money options are not sensitive 22 to volatility. They're not worth very much 23 regardless and that means when we invert the 24 relationship to try and assess volatility based on a 25 price, a small change in price moving within the

1 bid-ask spread causes an enormous change in 2 volatility. 3 So then, if you use that volatility 4 in a counterfactual scenario when we have no idea 5 what the volatility necessarily would be, Seru's 6 method is -- proves very sensitive damages, much --7 and often, I find that the amplified price noise that 8 Seru incorporates includes my point estimate as -- as 9 a plausible value. 10 So in that sense, in an economically 11 meaningful sense, we don't disagree for most of these 12 options. 13 So let's see if I can break this down Ο. 14 with you, Professor. Okay? First, the exercise here 15 of what you and Professor -- or Dr. Hartzmark were 16 trying to do, right, is to come up with a 17 calculation -- ultimately, a calculation of damages 18 based on the trading of options. 19 Do you understand that? 20 I understand that is Michael Α. 21 Hartzmark's application of my methodology, yes. 22 And you would agree with me that, in 23 order to know what the damages are, you actually have 24 to know what the price paid for an option was, and

what the theoretically or but-for price of that

25

1 numbers.

And then if you just look at the width that is possible with Seru's methodology, there's a wide band and the difference between our methods seems rather smaller than the width of Seru's band.

I also see these wiggles and the dots bouncing around on top, again, because surprisingly it's happening at the 400, the 420 and 430 options in Figure 3 on top.

So I see some of those dots moving around in a noisy, sort of implausible fashion. Like I don't think that the damages were that nonmonotonic bouncing down, up and down.

So when I just see the visual noise created by -- by something in the data and I see the width of the difference between the bid and ask, that strikes me as larger than the difference between the red dots and Seru's dots.

So overall that even if mine is not always literally within it, it's very close, especially in comparison to the error inherent.

And finally, they sometimes are different, right? You make different assumptions and use different inputs. You get different conclusions.

15

16

17

18

19

20

21

22

23

24

25

- "microstructured noise" is where things actually trade in the market, right?
- Well, I mean that when -- when Α. counsel, you -- everyone talks about "the price," they -- not only have they been vague about what they mean, they don't always know what they mean. to use a quantum physics metaphor that in Newtonian physics a particle has a position. It's a point mass with a known location.

But in quantum physics, it has an unknown location, and you might ask: Well, can you just look at it? And the answer is yes. But after you look at it, it's no longer in the same place, and

1	Q. Okay. Contrast that with the damages
2	your model predicts of negative \$2.20, right?
3	A. Yes.
4	Q. Again, not even close, right?
5	A. Wrong. I mean, if you look at the
6	when you say "not even close," that invites me to
7	make a comparison of distance.
8	And I want to make three adjacent
9	comparisons to keep this visually simple.
10	For the row you have highlighted, the
11	difference is \$4.06 to 1.63. So there's more than a
12	\$2 difference, in Seru's going between the bid and
13	ask, and that is reasonably large compared to my
14	estimate of 2.20, but even worse, if you look at the
15	previous row, the the bid-ask error between Seru's
16	damages goes from positive \$8 to negative \$3, an \$11
17	swing and the subsequent row goes from 8.64 to
18	negative 79, more than an \$8 swing or \$9 swing.
19	So it's hard for me to evaluate one
20	or even two numbers at the same time in terms of
21	closeness, reliability, validity.
22	I see enormous differences between
23	the bid and ask measures of damages with Seru's
24	methodology, again, on the order of 8 or \$10
25	differences caused by this and this is adjacent

```
1
            0.
                     Now, you say in -- if you look at
 2
     your opening report, Paragraph 141, please.
 3
                     Paragraph 141.
            Α.
 4
                     Yes, sir.
            Ο.
                     I've got 146, 144, 141, discussing
 5
            Α.
 6
     Figure 16.
 7
                     It's on page 90 -- oh, wait, I've got
            0.
 8
     the wrong report.
 9
                     I understand I've experienced it
            Α.
10
     today.
11
                     Yep, 141 on page 46 of your report.
            Q.
12
     Okay.
13
                     You say: Figure 16 further indicates
14
     that the drop in long-term implied volatility was not
15
     due to market-wide forces, but rather was specific to
16
     Tesla.
17
                     What's the basis of that statement?
18
                     Let me read clearly, so I don't
            A.
19
     confuse two figures as I did earlier.
20
                     So Figure 16 -- yeah -- so that says
21
     Figure 16 is on the previous page.
22
                          So Figure 16 is on page 45, I
23
     believe, and, all right. So if you look at Figure
24
     16, I have over a hundred dots on that figure
25
     representing the percentage changes in at-the-money
```

1 forward straddle prices. 2 This is extremely close to the daily 3 return, percentage change or percentage return. I 4 think I have controlled for the maturity to keep them 5 exactly constant, but this is change in volatility, 6 and if you look inside that shaded box, we see most 7 of the time long-term volatility and short-term 8 volatility move together, and here when I'm saying 9 "volatility," of course I really mean straddle 10 prices. They are monotonic transforms of each other. 11 So most of the time there's really a 12 very tight correlation between these. Of course 13 long-term volatility moves less than short-term 14 volatility. So the slope is not one, but I see 15 several outliers and very curiously on the 7th, I see 16 something surprising that I see, that X shows a -- is 17 slightly positive. An X is to the right of zero, 18 which means short-term volatility rows, by which I 19 mean short-term straddle prices increased as a 20 function of the stock price. 21 I believe the stock price rose on 22 August 7th, on the day of the tweet. So that means 23 that short-term options call plus the put rose 24 at-the-money. And then -- but the height of the dot 25 refers to the long-term volatility change, which is a

```
1
     drop in the long-term straddle price of negative .3%.
2
                    So it's not that either number is
3
     particularly impossible, although that drop in
4
     long-term volatility is quite pronounced. That's the
5
     largest drop in long-term volatility and it occurred
6
     on a day that short-term volatility rose. So that is
7
     extremely reasonable. Notice it's completely outside
8
     the cluster for long and short-term options to move
9
     in option directions.
10
                    So something really unusual happened
11
     on that day where long and short-term options moved
12
     in option directions.
13
                    If it were an increase in an overall
14
     market volatility or decrease in overall market
15
     volatility, we would expect them both to rise or both
16
     to fall.
17
                    Indeed, even if it were an increase
18
     in Tesla-specific uncertainty or a decrease in that,
19
     we would expect both to move together, but instead we
20
     see opposite directions.
21
                    So your question was why is that not
22
     market-wide forces? Because it's -- it's, really,
23
     you know, a weird opposite movement.
24
                    Now, volatility in the market changed
            0.
25
     the same day on August 7th.
```

1	1	Did you observe that?
2	A. (1	What do you mean "volatility in the
3	market"?	<del>-</del>
4	Q.	So, for example, you're familiar with
5	the VIX index,	right?
6	A. (2	Yes, I am.
7	Q.	Commonly used measure of volatility,
8	right?	
9	A. (1	Uh-huh.
10	Q.	You have to answer yes or no, sir.
11	A.	Yes.
12	Q.	I know you were taking a sip of your
13	beverage.	
14	A. 1	Right.
15	Q. ]	Did you track the VIX or any other
16	index of volation	lity, whether market wide or industry
17	wide, to see if	it changed during the Class Period?
18	A. 1	No, I didn't because I had a better
19	control. I had	Tesla volatility long and short, and
20	this graph shows	s that they usually are proxies for
21	each other in the	he sense that they usually move in the
22	same direction	in a linear relationship.
23	3	So in order to use a market index or
24	an industry inde	ex, I would need to assume some
25	relationship and	d surely Tesla options have more

22

23

24

25

Q.

Α.

the quantum of changes --

Yes.

eposi	eposition of Steven Heston In Re Tesia, Inc. Securities Litt		
1	relationship to other Tesla options than the S&P 500		
2	does.		
3	Q. Now, Professor, did you during the		
4	Class Period, August 7th to the 17th, did you do		
5	anything to account for or to extract the impact on		
6	volatility of other forces, whether market forces,		
7	industry forces or something else?		
8	A. I did it by comparing Tesla options		
9	to other Tesla options, I implicitly accounted for		
10	all forces that would affect Tesla options in common,		
11	but I and that's why I did not explicitly try and		
12	formulate some methodology relating to Tesla		
13	volatility to Tesla non-volatility because that would		
14	incorporate additional assumptions.		
15	Q. Okay. Now, you what you		
16	essentially did was you built a model to measure the		
17	change in prices based on assumed change in applied		
18	volatility. Is that generally accurate?		
19	A. Yes, based on the changes in the		
20	stock price and changes in the applied volatility.		

-- the impact quantum, did you do Q. anything to assess whether some or all of that impact

So just focusing on the changes, on

1	UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF CALIFORNIA
2	FOR THE NORTHERN DISTRICT OF CABIFORNIA
3	I, Jennifer L. Wielage, CCR No. 30X100191600,
4	Certified Court Reporter, certify:
5	That the foregoing proceedings were taken
6	before me at the time and place therein set forth, at
7	which time the witness was put under oath by me;
8	That the testimony of the witness, the
9	questions propounded, and all objections and
10	statements made at the time of the examination were
11	recorded stenographically by me and were thereafter
12	transcribed;
13	That a review of the transcript by the
14	deponent was requested;
15	That the foregoing is a true and correct
16	transcript of my shorthand notes so taken.
17	I further certify that I am not a relative or
18	employee of any attorney of the parties, nor
19	financially interested in the action.
20	I declare under penalty of perjury under the
21	laws of California that the foregoing is true and
22	correct.
23	Dated this 16th day of March 2022.
24	gennifer L. Wilage
25	Jennifer L. Wielage, CCR, RPR, CRR

# EXHIBIT II

EXCERPTS FROM TESLA INC.'S 10-K DECEMBER 31, 2021

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

#### **FORM 10-K**

		FORM 10-K	
(Mark One)  ⊠ ANNUAL REPO  ACT OF 1934	RT PURSUANT TO	SECTION 13 OR 15(	d) OF THE SECURITIES EXCHANGE
	For the	fiscal year ended December	31, 2021
☐ TRANSITION R EXCHANGE AC		OR T TO SECTION 13 OI	R 15(d) OF THE SECURITIES
		ition period from	<del>-</del>
	Com	nmission File Number: 001-	34756
		Tesla, Inc.	
	(Exact nam	e of registrant as specified i	n its charter)
	Delaware r other jurisdiction of ation or organization)		91-2197729 (I.R.S. Employer Identification No.)
Α	01 Tesla Road austin, Texas principal executive offices)		78725 (Zip Code)
( )		(512) 516-8177 ant's telephone number, including	•
	Securities regi	stered pursuant to Section 1	2(b) of the Act:
Title of ea	ach class	Trading Symbol(s)	Name of each exchange on which registered
Commo	n stock	TSLA	The Nasdaq Global Select Market
	Securities regi	stered pursuant to Section 1 None	12(g) of the Act:
Indicate by check ma Yes ⊠ No □	rk whether the registrant	is a well-known seasoned iss	uer, as defined in Rule 405 of the Securities Act.
Indicate by check ma	rk if the registrant is not i	required to file reports pursua	nt to Section 13 or 15(d) of the Act. Yes □ No
Exchange Act of 1934 ("Ex	change Act") during the		red to be filed by Section 13 or $15(d)$ of the Securities such shorter period that the registrant was required to 90 days. Yes $\boxtimes$ No $\square$
	gulation S-T (§232.405 of	f this chapter) during the prec	every Interactive Data File required to be submitted reding 12 months (or for such shorter period that the
reporting company, or an er	nerging growth company		accelerated filer, a non-accelerated filer, a smaller accelerated filer," "accelerated filer," "smaller nge Act:
Large accelerated filer			Accelerated filer □
Non-accelerated filer			Smaller reporting company □
Emerging growth company			

#### 

Energy Generation and Storage Segment

Energy Generation and Storage

Cost of energy generation and storage revenue includes direct and indirect material and labor costs, warehouse rent, freight, warranty expense, other overhead costs and amortization of certain acquired intangible assets. Cost of energy generation and storage revenue also includes charges to write down the carrying value of our inventory when it exceeds its estimated net realizable value and to provide for obsolete and on-hand inventory in excess of forecasted demand. In agreements for solar energy systems and PPAs where we are the lessor, the cost of revenue is primarily comprised of depreciation of the cost of leased solar energy systems, maintenance costs associated with those systems and amortization of any initial direct costs.

#### Leases

We adopted ASC 842, Leases, as of January 1, 2019 using the cumulative effect adjustment approach ("adoption of the new lease standard"). In addition, we elected the package of practical expedients permitted under the transition guidance within the new standard, which allowed us to carry forward the historical determination of contracts as leases, lease classification and not reassess initial direct costs for historical lease arrangements. The finance lease classification under ASC 842 includes leases previously classified as capital leases under ASC 840.

#### Research and Development Costs

Research and development costs are expensed as incurred.

#### Marketing, Promotional and Advertising Costs

Marketing, promotional and advertising costs are expensed as incurred and are included as an element of selling, general and administrative expense in the consolidated statement of operations. Marketing, promotional and advertising costs were immaterial for the years ended December 31, 2021, 2020 and 2019.

#### Income Taxes

Income taxes are computed using the asset and liability method, under which deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

We record liabilities related to uncertain tax positions when, despite our belief that our tax return positions are supportable, we believe that it is more likely than not that those positions may not be fully sustained upon review by tax authorities. Accrued interest and penalties related to unrecognized tax benefits are classified as income tax expense.

The Tax Cuts and Jobs Act ("TCJA") subjects a U.S. shareholder to tax on global intangible low-taxed income ("GILTI") earned by certain foreign subsidiaries. Under GAAP, we can make an accounting policy election to either treat taxes due on the GILTI inclusion as a current period expense or factor such amounts into our measurement of deferred taxes. We elected the deferred method, under which we recorded the corresponding deferred tax assets and liabilities on our consolidated balance sheets, currently subject to valuation allowance.

#### Comprehensive Income (Loss)

Comprehensive income (loss) is comprised of net income (loss) and other comprehensive income (loss). Other comprehensive income (loss) consists of foreign currency translation adjustments and unrealized net gains and losses on marketable securities that have been excluded from the determination of net income (loss).

#### Stock-Based Compensation

We use the fair value method of accounting for our stock options and restricted stock units ("RSUs") granted to employees and for our employee stock purchase plan (the "ESPP") to measure the cost of employee services received in exchange for the stock-based awards. The fair value of stock option awards with only service and/or performance conditions is estimated on the grant or offering date using the Black-Scholes option-pricing model. The Black-Scholes option-pricing model requires inputs such as the risk-free interest rate, expected term and expected volatility. These inputs are subjective and generally require significant judgment. The fair value of RSUs is measured on the grant date based on the closing fair market value of our common stock. The resulting cost is recognized over the period during which an employee is required to provide service in exchange for the awards, usually the vesting period, which is generally four years for stock options and RSUs and six months for the ESPP. Stock-based compensation expense is recognized on a straight-line basis, net of actual forfeitures in the period.

#### Note 13 – Equity Incentive Plans

In June 2019, we adopted the 2019 Equity Incentive Plan (the "2019 Plan"). The 2019 Plan provides for the grant of stock options, restricted stock, RSUs, stock appreciation rights, performance units and performance shares to our employees, directors and consultants. Stock options granted under the 2019 Plan may be either incentive stock options or nonstatutory stock options. Incentive stock options may only be granted to our employees. Nonstatutory stock options may be granted to our employees, directors and consultants. Generally, our stock options and RSUs vest over four years and our stock options are exercisable over a maximum period of 10 years from their grant dates. Vesting typically terminates when the employment or consulting relationship ends.

As of December 31, 2021, 49.0 million shares were reserved and available for issuance under the 2019 Plan.

The following table summarizes our stock option and RSU activity for the year ended December 31, 2021:

	Stock Options				RSUs				
	Weighted- Weighted- Average Aggregate					Weighted- Average			
	Number of Options		Average Exercise	Remaining Contractual		Intrinsic Value	Number of RSUs		Grant Date Fair
	(in thousands)		Price	Life (years)	(i	n billions)	(in thousands)		Value
Beginning of period	146,933	\$	68.26				18,789	\$	136.49
Granted	925	\$	830.83				2,192	\$	784.00
Exercised or released	(27,359)	\$	16.82				(7,877)	\$	115.36
Cancelled	(1,459)	\$	195.10				(1,667)	\$	208.37
End of period	119,040	\$	84.46	5.98	\$	115.75	11,437	\$	264.68
Vested and expected to vest, December 31, 2021	115,794	\$	83.15	6.11	\$	112.74	11,181	\$	250.49
Exercisable and vested, December 31, 2021 (1)	67,828	\$	74.47	5.96	\$	66.63			

DOLL

(1) Tranche 8 of the 2018 CEO Performance Award, which represents 8.4 million stock options, was achieved in the fourth quarter of 2021 and will vest upon expected certification following the filing of this Annual Report on Form 10-K.

The weighted-average grant date fair value of RSUs granted in the years ended December 31, 2021, 2020 and 2019 was \$784.00, \$300.51 and \$56.55, respectively. The aggregate release date fair value of RSUs in the years ended December 31, 2021, 2020 and 2019 was \$5.70 billion, \$3.25 billion and \$502 million, respectively.

The aggregate intrinsic value of options exercised in the years ended December 31, 2021, 2020, and 2019 was \$26.88 billion, \$1.55 billion and \$237 million, respectively. During the year ended December 31, 2021, our CEO exercised all of the remaining vested options from the 2012 CEO Performance Award, which amounted to an intrinsic value of \$23.45 billion.

#### **ESPP**

Our employees are eligible to purchase our common stock through payroll deductions of up to 15% of their eligible compensation, subject to any plan limitations. The purchase price would be 85% of the lower of the fair market value on the first and last trading days of each six-month offering period. During the years ended December 31, 2021, 2020 and 2019, we issued 0.5 million, 1.8 million and 2.5 million shares under the ESPP. There were 33.8 million shares available for issuance under the ESPP as of December 31, 2021.

#### Fair Value Assumptions

We use the fair value method in recognizing stock-based compensation expense. Under the fair value method, we estimate the fair value of each stock option award with service or service and performance conditions and the ESPP on the grant date generally using the Black-Scholes option pricing model. The weighted-average assumptions used in the Black-Scholes model for stock options are as follows:

	Year Ended December 31,				
	2021		2020		2019
Risk-free interest rate	0.66 %		0.26%		2.4 %
Expected term (in years)	4.3		3.9		4.5
Expected volatility	59%		69 %		48 %
Dividend yield	0.0%		0.0%		0.0%
Grant date fair value per share	\$ 384.07	\$	216.14	\$	22.32

The fair value of RSUs with service or service and performance conditions is measured on the grant date based on the closing fair market value of our common stock. The risk-free interest rate is based on the U.S. Treasury yield for zero-coupon U.S. Treasury notes with maturities approximating each grant's expected life. We use our historical data in estimating the expected term of our employee grants. The expected volatility is based on the average of the implied volatility of publicly traded options for our common stock and the historical volatility of our common stock.

#### 2018 CEO Performance Award

In March 2018, our stockholders approved the Board of Directors' grant of 101.3 million stock option awards, as adjusted to give effect to the five-for-one stock split effected in the form of a stock dividend in August 2020 ("Stock Split"), to our CEO (the "2018 CEO Performance Award"). The 2018 CEO Performance Award consists of 12 vesting tranches with a vesting schedule based entirely on the attainment of both operational milestones (performance conditions) and market conditions, assuming continued employment either as the CEO or as both Executive Chairman and Chief Product Officer and service through each vesting date. Each of the 12 vesting tranches of the 2018 CEO Performance Award will vest upon certification by the Board of Directors that both (i) the market capitalization milestone for such tranche, which begins at \$100.0 billion for the first tranche and increases by increments of \$50.0 billion thereafter (based on both a six calendar month trailing average and a 30 calendar day trailing average, counting only trading days), has been achieved, and (ii) any one of the following eight operational milestones focused on total revenue or any one of the eight operational milestones focused on Adjusted EBITDA have been achieved for the four consecutive fiscal quarters on an annualized basis and subsequently reported by us in our consolidated financial statements filed with our Forms 10-Q and/or 10-K. Adjusted EBITDA is defined as net income (loss) attributable to common stockholders before interest expense, provision (benefit) for income taxes, depreciation and amortization and stock-based compensation. Upon vesting and exercise, including the payment of the exercise price of \$70.01 per share, our CEO must hold shares that he acquires for five years post-exercise, other than a cashless exercise where shares are simultaneously sold to pay for the exercise price and any required tax withholding.

The achievement status of the operational milestones as of December 31, 2021 is provided below. Although an operational milestone is deemed achieved in the last quarter of the relevant annualized period, it may be certified only after the financial statements supporting its achievement have been filed with our Forms 10-Q and/or 10-K.

	<b>Total Annualized Revenue</b>			Annualized Adj	usted EBITDA
<u> </u>	Milestone (in billions)	Achievement Status		Milestone (in billions)	Achievement Status
\$	20.0	Achieved	\$	1.5	Achieved
\$	35.0	Achieved	\$	3.0	Achieved
\$	55.0	Probable	\$	4.5	Achieved
\$	75.0	Probable	\$	6.0	Achieved
\$	100.0	-	\$	8.0	Achieved
\$	125.0	-	\$	10.0	Achieved (1)
\$	150.0	-	\$	12.0	Probable
\$	175.0	-	\$	14.0	Probable

(1) Achieved in the fourth quarter of 2021 and expected to be certified following the filing of this Annual Report on Form 10-K.

Stock-based compensation under the 2018 CEO Performance Award represents a non-cash expense and is recorded as a Selling, general, and administrative operating expense in our consolidated statement of operations. In each quarter since the grant of the 2018 CEO Performance Award, we have recognized expense, generally on a pro-rated basis, for only the number of tranches (up to the maximum of 12 tranches) that corresponds to the number of operational milestones that have been achieved or have been determined probable of being achieved in the future, in accordance with the following principles.

#### Case 3:18-cv-04865-EMC Document 485 Filed 09/20/22 Page 512 of 638

#### **SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

	Tesla, Inc.
Date: February 4, 2022	/s/ Elon Musk
	Elon Musk
	Chief Executive Officer
	(Principal Executive Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Elon Musk Elon Musk	Chief Executive Officer and Director (Principal Executive Officer)	February 4, 2022
/s/ Zachary J. Kirkhorn Zachary J. Kirkhorn	Chief Financial Officer (Principal Financial Officer)	February 4, 2022
/s/ Vaibhav Taneja	Chief Accounting Officer (Principal Accounting Officer)	February 4, 2022
Vaibhav Taneja /s/ Robyn Denholm  Robyn Denholm	Director	February 4, 2022
/s/ Ira Ehrenpreis  Ira Ehrenpreis	Director	February 4, 2022
/s/ Lawrence J. Ellison  Lawrence J. Ellison	Director	February 4, 2022
/s/ Hiromichi Mizuno  Hiromichi Mizuno	Director	February 4, 2022
/s/ James Murdoch  James Murdoch	Director	February 4, 2022
/s/ Kimbal Musk  Kimbal Musk	Director	February 4, 2022
/s/ Kathleen Wilson-Thompson  Kathleen Wilson-Thompson	Director	February 4, 2022

# EXHIBIT JJ

# EXCERPTS FROM THE DEPOSITION OF EMIT SERU TAKEN MARCH 22, 2022

```
Page 1
               UNITED STATES DISTRICT COURT
 1
         FOR THE NORTHERN DISTRICT OF CALIFORNIA
 3
                   SAN FRANCISCO DIVISION
 4
 5
                                      ) Civil Action
                                        No. 3:18-cv
 6
       IN RE TESLA, INC.
                                     )
 7
       SECURITIES LITIGATION
                                     ) -04865-EMC
 8
 9
10
11
            REMOTE VIDEOTAPED DEPOSITION OF AMIT SERU
12
                          TAKEN ON
13
                   TUESDAY, MARCH 22, 2022
14
15
16
17
18
19
20
21
    Reported by:
22
23
    BRENDA R. COUNTZ, RPR-CRR
24 CSR NO. 12563
25
    Job no. 208477
```

Page 7 1 appearance for the record and stipulate to the validity of this video recording and remote 3 swearing. MR. PORRITT: Nicholas Porritt on 4 behalf of the plaintiff and the class and we so 5 6 stipulate. 7 MR. ALDEN: Anthony Alden from Quinn Emanuel on behalf of defendant and we stipulate. 8 9 THE VIDEOGRAPHER: Thank you. Will the 10 court reporter please swear in the witness. 11 12 AMIT SERU, 13 having been first duly sworn, was 14 examined and testified as follows: 15 16 EXAMINATION 17 BY MR. PORRITT: Good morning, Professor Seru. As you 18 Q. 19 heard, my name is Nicholas Porritt. I'm one of 20 the attorneys for the plaintiff and the class in 21 this case and I'll be taking your deposition 22 today. 23 So we are taking your deposition 24 because you submitted an expert report on behalf 25 of defendants, correct?

Page 27

- 1 choices that might be there. So these didn't use
- 2 the Black-Scholes.
- I do have another study that comes to
- 4 mind, because you mentioned Black-Scholes, where
- 5 I look at whether CEO compensation contracts are
- 6 set in a certain way or they are not.
- 7 And there when I'm evaluating the
- 8 compensation contracts of CEOs and executives,
- 9 there is the normal parts of the compensation but
- 10 there are options and those options are valued
- 11 with Black-Scholes in that context.
- 12 Q. So these studies you've talked about in
- 13 terms of refinancing by households, saying they
- 14 have option-like features, they do not involve
- 15 equity options, correct?
- 16 A. They did not involve equity options.
- 17 The one which I just mentioned, the CEO
- 18 one, that did have equity-like features.
- 19 Q. And for that equity option study, you
- 20 used Black-Scholes?
- 21 A. There the context was I was looking at
- 22 overall compensation and one of the ways in which
- 23 options are evaluated for quick comparison is to
- 24 use Black-Scholes.
- Q. And you understand that Tesla itself

Page 28

- 1 uses Black-Scholes method to value its options
- 2 for accounting purposes; is that correct?
- A. I'm aware that Tesla uses Black-Scholes
- 4 to evaluate its options for the purposes of
- 5 giving to employees and so on. That's a pretty
- 6 standard practice.
- 7 Like I said, there are lots of people
- 8 using this model in different ways and everyone
- 9 knows that this model has substantial errors and
- 10 biasses. Depending on the context, those biasses
- 11 and errors may or may not be important.
- 12 I think when it comes to looking at
- 13 compensation in a stable environment, maybe it's
- 14 a reasonable way of looking at how much equity
- 15 you might want to give or options you might want
- 16 to give to your employees.
- 17 O. You've been talking about errors
- 18 regarding Black-Scholes. Those are errors in
- 19 predicting pricing levels; is that correct?
- 20 A. So, in my report I talk about a lot of
- 21 potential errors in the way that Professor Heston
- 22 applies this to come up with the method that he
- 23 does. And, you know, the errors are both in
- 24 levels which pertains to -- a very simple way of
- 25 seeing that is that if you look at Professor

Page 275 STATE OF CALIFORNIA 1 SS COUNTY OF LOS ANGELES I, BRENDA R. COUNTZ, Certified Shorthand Reporter No. 12563 for the State of California, 4 5 do hereby certify: 6 That prior to being examined, the witness named in the foregoing deposition was 7 duly sworn to testify the truth, the whole truth, 8 9 and nothing but the truth; 10 That said deposition was taken down by me in shorthand at the time and place therein 11 12 named and thereafter transcribed and that the 13 same is a true, correct, and complete transcript 14 of said proceedings. 15 Before completion of the deposition, review of the transcript [ ] was [ ] was not 16 If requested, any changes made by the 17 requested. deponent during the period allowed are appended 18 19 hereto. 20 I further certify that I am not 21 interested in the outcome of the action. 22 Witness my hand this 24th day of March, 2022. Breada K. Cou 23 24 25 Brenda R. Countz, CSR No. 12563

### EXHIBIT KK

# EXCERPTS FROM THE DEPOSITION OF MICHAEL HARTZMARK TAKEN MARCH 18, 2022

```
1
                  UNITED STATES DISTRICT COURT
                NORTHERN DISTRICT OF CALIFORNIA
2
3
    IN RE:
                                     ) Case No.
4
    TESLA, INC., SECURITIES
                                     )18-cv-04865-EMC
    LITIGATION
5
6
7
               **********
8
                REMOTE VIDEOTAPED DEPOSITION OF
9
                       MICHAEL HARTZMARK
               March 18, 2022
10
11
12
13
            MICHAEL HARTZMARK, produced as a witness at
14
      the instance of the Plaintiffs, was duly sworn and
15
      deposed in the above-styled and numbered cause on
16
      March 18, 2022, from 8:39 a.m. to 6:28 p.m. CST,
17
      stenographically reported, pursuant to the Federal
18
      Rules of Civil Procedure and the provisions stated
19
      on the record.
2.0
21
22
                     Rebecca A. Graziano, CSR, RMR, CRR
      Reported by:
23
                     Texas CSR 9306
                     California CSR 14407
24
                     Illinois CSR 084.004659
25
```

1	PROCEEDINGS
2	(On the record at 8:39 a.m. CST)
3	THE VIDEOGRAPHER: We are now on
4	the record. Today's date is March 18th,
5	2022. The time is 9:39 a.m. Eastern.
6	This is the recorded video
7	deposition of Michael Hartzmark in the
8	matter of in re Tesla, Incorporated,
9	securities litigation in the United States
10	District Court, Northern District of
11	California, Case Number 18-cv-04865-EMC.
12	My name is Paul D'Ambra from
13	Everest Court Reporting. I'm the video
14	specialist. Our court reporter today is
15	Becky Graziano, also with Everest. All
16	counsel appearing today will be noted on
17	the stenographic record.
18	Will the court reporter please
19	swear in the witness.
20	(Witness duly sworn.)
21	MICHAEL HARTZMARK,
22	being first duly sworn, testified as follows:
23	EXAMINATION
24	BY MR. ROSSMAN:
25	Q Very good. Good morning again,

1	they all form an interwoven bundle of information
2	that was disclosed to the market prior to the
3	close of trading on 8/7.
4	Q Well, I'm asking only about the 12:48 p.m.
5	tweet. So stick with me on that for a moment.
6	And focusing on the first sentence:
7	"Am considering taking Tesla private at \$420."
8	Okay? What's the subject of the sentence?
9	A That Mr. Musk
10	Q Who is the subject of the sentence?
11	A Mr. Musk, as the largest shareholder, part
12	of the board of directors, is tweeting that Tesla
13	is considering going private at \$420. I'm not
14	sure again, I am not the trier of fact. You
15	know, to mince words, I'm assuming that that's
16	going to be found to be a false and misleading
17	statement along with the other information that is
18	disclosed, as well as is failed to disclose.
19	But I am not here as a going-private
20	expert. I am not here as a corporate governance
21	expert. I am not here as a regulatory expert.
22	I'm here as an economist, and what I can tell you
23	is that upon the tweet, there was a substantial
24	change in the implied volatility in the options
25	markets where short- and long-term volatility

1 changed. I can tell you there was substantial and material, from a statistical standpoint, increase 2 3 in the price of Tesla. What I can tell you was 4 that there was analyst reports one week after 5 earnings had been issued putting out new analyst 6 There were TV, press, and other media reports. 7 covering this, and therefore, from an economic 8 perspective, it's material important information. 9 And to the extent that this, by 10 itself -- and, again, I'm not opining this by 11 itself -- is necessarily -- is misleading, but it 12 is part of an interwoven bundle. And to the 13 extent the Court finds this by itself to be 14 misleading, you know, then, again, I've 15 demonstrated that there was harm to investors. 16 Now, Dr. Hartzmark, what was the question 0 17 I asked you? 18 The question you've asked me, again, is to Α 19 somehow narrowly redefine the allegations --20 No, no. What was the actual question I Q 21 asked you. Do you know? 22 "Funding secured." Α 23 I asked you -- actually, I was referring 0 24 to the first sentence of the tweet, "Am

considering taking Tesla private at \$420."

25

And my

an artificial construct. Okay? I look at this minute by minute. But what I looked at is -- over this event window, I looked at the information. I have 169 pages evaluating that information that flows, and furthermore, I looked for information that could be considered confounding and, therefore, might impact that corrective interval.

So the statistics, although not necessary -- because, again, it's an artificial construct of ten calendar days -- is saying that over the event, with the disclosure of information that revealed the truth -- maybe day by day, minute by minute, hour by hour -- that that was statistically significant. So from a statistical standpoint -- but forget the statistics.

From an economic perspective, we saw the implied volatility drop, you know, anomalously and substantially. We saw it then return. We saw the prices go up by a material statistically significant amount, and then we saw them drop by a statistically significant amount. We saw news information relating to this. We saw changes in the market that would reflect curative information, as well as misleading information such as was disclosed on May 13.

```
1
      you turn to your report, your opening report --
 2
      I'm sorry. Your damages report on Page 52,
 3
      please?
 4
              Let me put this back together.
       Α
 5
                   Which page, please?
 6
               52.
       Q
 7
                  MR. ROSSMAN: And -- so that's
 8
           Exhibit 375. You can put that on the
 9
           screen, Page 52.
                              Okav?
10
      BY MR. ROSSMAN:
11
              And you'll see you've got a Heading (b)
       0
12
                  "After the market opened for trade:
      that savs:
13
      The beginning of the revolution -- revelation of
14
      the truth about the likelihood of the
15
      going-private transaction and the materialization
16
      of consequential harm."
17
                  That's your heading; right?
18
       Α
              That is my heading, correct.
19
              Okay. And you write, Paragraph 82 of your
       0
20
      report: "Beginning with a 'New York Times'
21
      article at 10:24 a.m. on August 8th, 2018, news
22
      articles reported that the SEC was probing Tesla
23
      over the Musk tweets, which along with reports of
24
      skepticism of the deal, caused the stock price to
25
      decline."
```

1 Do you see that? 2 A Yes. 3 Okay. You continue to hold the view that 0 4 "The New York Times" article was the beginning of 5 the revolut- -- revelation of the truth? 6 Of the consequential harm of the -- yeah. A 7 Yes, the consequential harm that the SEC was 8 investigating. 9 And we just observed that the stock price 0 10 actually rose after "The New York Times" article. 11 Can you explain to me how it's a corrective 12 statement or a revelation of the truth or 13 consequential harm if it caused the stock price to 14 rise? 15 MR. PORRITT: Object to form. He's 16 answered that almost precise question 17 earlier. 18 THE WITNESS: The -- there's a 19 10:24 There's a 1:32. There's a 1:59. 2.0 There's a 3:45. I mean, and those are 21 just limited. I mean, there's news 22 throughout the day. I mean, and, again, 23 that's why I'm not -- I'm not making a 24 statement. I'm making a statement that as 25 an economist, I have to look at the

1	August 17th?
2	A Have I done any analysis?
3	Q Have you done any alternative calculations
4	or any alternative analyses using a different
5	event window?
6	A As I said, all I have to do is change the
7	but-for price and it all flows through. So the
8	answer is no.
9	Q Okay. Now, one of the things that you
10	told me is that you looked at the changes to
11	<pre>implied volatility?</pre>
12	A Yes.
13	Q Can you just tell me what significance you
14	drew from changes in the implied volatility as it
15	relates to the issue of what the appropriate event
16	window is?
17	A Well, as is demonstrated in detail in
18	Professor Heston's report, the implied
19	volatility following the following the tweet,
20	the implied volatility of the short-term versus
21	the long-term options had a substantial anomalous
22	change consistent with a market a market
23	reflecting a going-private transaction. The
24	this was especially prominent in long-term implied
25	volatility, which would have the highest which

1	would be most sensitive to this expected change in
2	the price dispersion of the stock in the future.
3	What I found was that the dramatic
4	decline in implied volatility that was observed
5	right after the tweet say, by the close of
6	trade on August 7th returned to the level of
7	August 6th or to the pre-tweet as of the end of
8	trade on August 17th.
9	Q Okay. And did you rely on those changes
10	in implied volatility with respect to, you know,
11	what the appropriate window was?
12	As part of the economic analysis, yes.
13	Q And if I understand what you're saying,
14	the implied volatility of the long-term options
15	dropped in response to the announcement of a
16	potential take-private transaction?
17	A Yes. The implied volatility is measured
18	by the ATM forward straddles fell from about 50 to
19	32, and then returned to about 49.
20	Q Okay. And what's the significance of it
21	returning to its prior level?
22	A What's the significance?
23	Q Yeah.
24	A Going back to what was a stable implied
25	volatility prior and a stable implied volatility

1 after, that the market was no longer incorporating 2 into the pricing the going-private transaction. 3 Okay. We'll perhaps get a chance to do 0 4 that in a little more detail in a bit. 5 Now, you -- one of the things that you 6 analyzed -- and for your benefit, we can go to 7 Page 163 of your damages report in Paragraph 270. 8 One of the things that you analyzed was a 2025 9 note. 10 We're on Page 1- -- the results of the Α 11 event study for the notes? 12 Q Yes. 13 Α Yes. 14 And you say here -- so it's the bottom of 0 15 the Paragraph 270 -- "Although the cumulative 16 abnormal return for the 2025 note is negative 17 2.5 percent over the corrective interval, because 18 the 2025 note is not convertible and the 19 cumulative abnormal return was not statistically 20 significant at the 5 percent level, I do not 21 implement my damages analysis for the 2025 note." 22 Α Right. 23 Am I right to understand that because you 0 24 concluded you could not find a statistically 25 significant abnormal return, that your threshold

1 19.51 percent and the cumulative abnormal return 2 of negative 17.56 percent, how did you determine 3 that? 4 Well, the cumulative return is based on Α 5 the actual price movements, and the cumulative 6 abnormal return adjusts for the market and 7 industry. 8 0 Okay. And you adjusted for the market and 9 industry with respect to the stock price. 10 make any adjustments for the market and industry 11 with respect to the notes? 12 Α Yes. 13 0 Did you make any adjustments for market 14 and industry movements to the options? 15 Α Yes. 16 0 Did you make any adjustments to the 17 implied volatility of the options based on market 18 or industry movements? 19 I examined -- I didn't use it, but I A 20 examined VIX, which was all over the place. If 21 anything negatively correlated with the implied 22 volatility. It -- again, it came back to an 23 equilibrium level. The stability of the Tesla 24 implied volatility, pre and post, is pretty 25 profound. You know, and to the extent that

```
1
      somebody was -- that that adjustment -- you know,
2
      that the defendants could demonstrate that that
3
      adjustment was appropriate, you just plug it into
4
      my formulas. But I didn't feel it was necessary,
5
      and I believe Professor Heston also found -- you
6
      know, relying on the information that we had pre
7
      and post period, there was no adjustment for
8
      implied volatility.
9
                  But it would -- I mean, and, again,
10
      think about it. The -- if it were the case that
11
      there were market effects, you would have seen
12
      consistent movements in the short-term and
13
      long-term volatility. The fact that you had such
14
      profound anomalous and substantial changes in the
15
      relationship there would suggest that it's a
16
      second, third, or fourth order of fact relative to
17
      the firm specific.
18
              Well, you did observe that the VIX Index
       0
19
      moved all over the place during the class period;
20
      right?
21
       A
              Yeah.
                     Over the class period, actually --
22
      if I look from the -- from the August 6, it went
23
      up.
24
       Q
              Okay. And --
25
              And you're -- I mean, this is nine months
       A
```

```
1
      ago that I would have looked at it. But there
2
      were -- as -- I think I did and I found there was,
3
      like, little, if any, correlation with Tesla. And
4
      if there's no correlation, you're not going to get
5
      any -- any explanation of any variation. But
6
      there's also an issue, again, of -- if I -- I'm
7
      not even sure exactly how you would adjust it.
8
      But --
9
              Okay. Well, you didn't make any -- my
       0
10
      point is you didn't make any adjustments to the
11
      volatility of Tesla options based on market or
12
      industry changes?
13
              Well, like I said, it would -- of a small
       A
14
      order, I did not do it. But the fact that it's
15
      stable before, stable after, the short-term and
16
      the long-term, you know, don't move together,
17
      which they would if there were market or industry
18
      effects, is reasonable -- reasonable to interpret
19
      that the implied volatility was a firm --
20
      dominated by the firm specific effect.
21
       0
              Okav.
                     Did you observe -- withdrawn.
22
                  Now, the 17 -- going back to your
23
      Table 4, okay, we were looking at a moment ago,
24
      the 17.56 percent decline is based on a movement
25
      in the price from a high of 379.57 at the start of
```

1	UNITED STATES DISTRICT COURT
2	NORTHERN DISTRICT OF CALIFORNIA
3	IN RE:
4	)Case No. TESLA, INC., SECURITIES )18-cv-04865-EMC LITIGATION )
5	,
6	REPORTER'S CERTIFICATION REMOTE VIDEOTAPED DEPOSITION OF
7	MICHAEL HARTZMARK  March 18, 2022
8	
9	I, Rebecca A. Graziano, Certified Shorthand
10	Reporter in and for the States of Texas,
11	California, and Illinois, hereby certify to the
12	following:
13	That the witness, MICHAEL HARTZMARK, was
14	duly sworn and that the transcript of the oral
15	deposition is a true record of the testimony given
16	by the witness;
17	I further certify that pursuant to FRCP Rule
18	30(f)(1) that the signature of the deponent:
19	was requested by the deponent or a
20	party before the completion of the deposition and
21	returned within 30 days from date of receipt of
22	the transcript. If returned, the attached Changes
23	and Signature Page contains any changes and the
24	reasons therefor.
25	was not requested by the deponent or a

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2.0

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party before the completion of the deposition.

I further certify that I am neither attorney nor counsel for, related to, nor employed by any of the parties to the action in which this testimony was taken.

Further, I am not a relative or employee of any attorney of record in this cause, nor do I have a financial interest in the action.

Certified on March 20, 2022



Rebecca A. Graziano, CSR, RMR, CRR

Texas CSR 9306

Expiration: 07/31/22 California CSR 14407 Expiration: 09/30/22 Illinois CSR 084.004659 Expiration: 05/31/23

24

25

### UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF CALIFORNIA

IN RE TESLA, INC. SECURITIES LITIGATION	Case No. 3:18-cv-04865-EMC
	Hon. Edward M. Chen

#### EXPERT REPORT OF STEVEN L. HESTON, PH.D.

**November 8, 2021** 

**Exhibit** 

368

Heston 3/16/2022 J.W.

#### **Table of Contents**

1	Intro	oduction	4
	1.1	Qualifications and Compensation	4
	1.2	Summary of Relevant Facts	5
	1.3	Statement of Assignment	5
2	Sum	mary of Opinions	6
3	Back	kground on Equity Options	7
	3.1	General Rights and Terms Concerning Equity Options	7
	3.1.1	Call Options	11
	3.1.2	Put Options	13
		B Put-Call Parity	
	3.1.4	Factors Affecting Option Prices	18
	3.2	Option Straddle	
	3.3	Options Markets and Exchange-traded Options	27
	3.3.1	1	
	3.3.2	2 Exchange-traded Options – Specifications	
	3.3.3	$\mathcal{E}$	
4	The	Black-Scholes-Merton Model	
	4.1	Background of Options Theory and the Black-Scholes-Merton Model	
	4.2	BSM Formulas	
	4.3	The BSM Model Revolutionized Options Markets	
	4.4	The BSM Model is the Accepted Industry and Academic Standard	
5	Equi	ty Options on Tesla Common Stock during the Class Period	
	5.1	The Market for Tesla Options was Substantial	
	5.2	Tesla Common Stock Price Movements Affect the Value of Tesla Options	
	5.3	Most Tesla Options were Traded Near-the-Money – Implied Volatility is Quantifiab	ole
		38	
	5.4	Long-Term ATM-forward Straddle Prices Fell on August 7, 2018	
	5.5	The Decrease in Long-term Implied Volatility Beginning after 12:48 p.m. on Augus	
		ffected Long-term Tesla Options of All Moneyness	
	5.5.1		
_	5.5.2		
6		BSM Model Can Calculate Counterfactual Option Prices	
		Measuring Implied Volatility Using ATM-forward Straddle Prices	
	6.2	The BSM Model Provides an Impact Quantum	
	6.2.1	1	
		2 But-for Fitted Option Value	
	6.3	The Black-Scholes Impact Quantum is Reliable, Reasonable and Robust Methodole	ogy
_		61	<i>C</i> 1
7	1 1	endix A	
8		endix B	
9		endix C	
1(		endix D	
	10.1	IVolatility Data	
	10.2	Bloomberg Data	/3

10.3	CBOE Data	73
10.4	Data Source Summary	74
	endix E	
11.1	Standardized ATM-Forward Straddle Price	75
11.2	Constant Maturity ATM-Forward Straddle Price	75
11.3	Constant Maturity Straddle	76
11.4	Raw Maturity Straddle	76
11.5	Scatter Plot	77
11.6	Trading Volume by Moneyness	77
11.7	Spread Change Plots	78
11.8	Regression	79
11.9	Option Bid-Ask Spread Curves	
11.10	Mid Prices on Consecutive Days	80
11.11	Mid-Price Drop	80
11.12	Spread Widening on August 7	
11.13	Black Scholes Charts	80
11.14	Overnight Returns	81

#### 1 Introduction

#### 1.1 Qualifications and Compensation

- 1. I have taught at the University of Maryland, Robert H. Smith School of Business from 2002. Since 2012, I have held the position of Professor of Finance. Prior to that, I held the position of Associate Professor of Finance. I have held previous faculty positions at Washington University in St. Louis as Assistant Professor of Finance (1994 to 1998), Columbia Business School as Visiting Assistant Professor of Finance (1993 to 1994), and Yale School of Organization and Management as Assistant Professor of Finance (1989 to 1993).
- 2. I hold a Ph.D. in Finance, awarded in 1990 by the Carnegie Mellon University, Graduate School of Industrial Administration. In addition to my Ph.D., I hold an M.S. degree in Finance and an M.S degree in Industrial Administration ("M.B.A."), awarded Carnegie Mellon University in 1987 and 1985 respectively. I also hold a B.S. degree from the University of Maryland, College Park, awarded in 1983, where I majored in Mathematics and Economics.
- 3. I have taught introductory Corporate Finance and Corporate Governance courses as well as Ph.D. classes on asset pricing theory, Options and Derivatives, International Finance, and Fixed Income. The majority of classes I have taught have been at the masters (M.B.A., Masters in Finance, Masters in Quantitative Finance) or undergraduate level.
- 4. Between 1998 and 2002 I worked in the private sector at Goldman Sachs in New York. I initially held the position of Vice President on the U.S. Arbitrage desk in the Fixed Income Division. I then moved to Quantitative Equities in Goldman Sachs' Asset Management division, where my position was Vice President.
- 5. As detailed in my curriculum vitae, I have authored or co-authored more than 20 published peer-reviewed scholarly articles.
- 6. A current copy of my curriculum vitae, including professional appointments and publications, is included as Appendix A.
- 7. My work in this matter is billed at the rate of \$700 per billable hour. In this matter I am also supported by staff from Fideres Partners LLP. My compensation does not depend in any way

on my opinions or the outcome in this matter or any other. I have no financial or other interest in Fideres Partners' billings in this matter.

#### 1.2 Summary of Relevant Facts

- 8. It is my understanding that a securities litigation class action was brought on behalf of the Class against Defendants Tesla, Inc. ("Tesla"), Elon Musk (Tesla's CEO and Chairman), and certain members of Tesla's Board of Directors for violations of the federal securities laws.
- 9. It is further my understanding that the Class Period: (a) begins on August 7, 2018 at 12:48 p.m. EDT when Mr. Musk tweeted "Am considering taking Tesla private at \$420. Funding secured."; and (b) ends on August 17, 2018, after the publication of a *New York Times* article.<sup>1</sup>

#### 1.3 Statement of Assignment

10. I have been retained by Court-appointed Lead Counsel and Class Counsel ("Counsel")<sup>2</sup> for Lead Plaintiff and Class Representative Glen Littleton and the putative Class<sup>3</sup> in the matter of *In re Tesla, Inc. Securities Litigation* to analyze the price movements of options on Tesla common stock during the Class Period from 12:48 p.m. EDT<sup>4</sup> on August 7, 2018 to August 17, 2018. As part of this engagement, I have reviewed historical Tesla stock and options data to evaluate: a) the effect of Tesla stock price movements on Tesla option values; and b) additional movements in Tesla option prices beyond the effect of stock price.

<sup>&</sup>lt;sup>1</sup> See, e.g., Consolidated Complaint for Violations of the Federal Securities Laws, In re Tesla, Inc. Secs Litig., ¶¶1-2, 6, Case No. 18-CV-04865 (EMC) (N.D. Cal. Jan. 16, 2019), ECF No. 184 (hereinafter, "Complaint"). See also Stipulation And Order For Class Certification, Case No. 18-CV-04865 (EMC) (N.D. Cal. Jan. 16, 2019), ECF No. 298.

<sup>&</sup>lt;sup>2</sup> Levi & Korsinsky, LLP.

<sup>&</sup>lt;sup>3</sup> It is my understanding the "Class" has been certified as "All individuals and entities who purchased or sold Tesla stock, options, and other securities from 12:48 p.m. EDT on August 7, 2018 to August 17, 2018 and were damaged thereby" (the "Class")." Stipulation and Order for Class Certification, ¶4, *In re Tesla, Inc. Secs. Litig.*, 3-18-cv-04865-EMC (N.D. Cal.), ECF No. 298. Additionally, "Excluded from the Class are: Defendants; the officers and directors of Tesla, Inc. at all relevant times; members of their immediate families and their legal representatives, heirs, successors, or assigns; and any entity in which Defendants have or had a controlling interest." ibid., ¶5.

<sup>&</sup>lt;sup>4</sup> All times are Eastern Daylight Time unless otherwise noted.

#### 2 SUMMARY OF OPINIONS

- 11. At-the-money-forward Tesla option prices, including straddles, provide a reasonable and reliable measurement of option prices relative to underlying stock prices. Section 3.2 explains that a "straddle" options position is when an investor buys both a put and a call with the same strike and maturity date simultaneously. Straddle holders bet that there will be a large change in the stock price, either upward or downward, but are neutral with respect to stock movements. Straddle prices therefore reflect "implied volatility," or the market's expectation of future stock price volatility.
- 12. Following 12:48 p.m. on August 7, 2018, Tesla stock prices rose, and long-term ATM-forward Tesla option straddle prices fell sharply. Section 5.4 shows that on August 7, 2018, following 12:48 p.m., long-term ATM-forward Tesla option straddles lost value. This decline in price is substantial and rare. This decline can be directly translated into a significant decrease in implied volatility using standard Black-Scholes-Merton formulas. I observe that at the same time, Tesla stock prices rose from around \$356.79, to \$385.93 during the Class Period, then dropped to \$305.5 at the close of August 17, 2018.6
- 13. *All long-term Tesla put options lost value on August 7, 2018*. Option theory predicts that rising stock prices and declining volatility will reduce the value of put options. As reflected in the Tesla options data, put options lost value on August 7, 2018, after 12:48 p.m.
- 14. Prices of long-term out-of-the money Tesla call options fell, while prices of long-term inthe-money Tesla call options rose on August 7, 2018. Call options benefitted from the rise in Tesla stock price but were negatively impacted by the fall in implied volatility. Consequently, the price of in-the-money and out-of-the-money Tesla call options diverged on August 7, 2018. These two countervailing effects during the Class Period must be netted to determine the combined impact on option prices.

<sup>&</sup>lt;sup>5</sup> Long-term expiries include October 19, 2018; November 16, 2018; December 21, 2018; January 18, 2019; February 15, 2019; March 15, 2019; June 21, 2019; August 16, 2019; and January 17, 2020. Short-term expiries include August 10, 2018; August 17, 2018; August 24, 2018; August 31, 2018; September 7, 2018, September 14, 2018; September 21, 2018; and September 28, 2019. I explain this distinction further in Section 5.4.

<sup>&</sup>lt;sup>6</sup> I do not further analyze Tesla stock prices, beyond the observations of historical prices reported.

- and reasonably calculated using the Black-Scholes-Merton model. I present a reliable, reasonable, and robust method to convert ATM-forward straddle prices into implied volatilities for any given maturity in the but-for world and to calculate the impact on option prices using the Black-Scholes-Merton formulas given the changes in the underlying stock price and implied volatilities. If asked to do such, I can measure the impact of the alleged misstatements on Tesla options by inputting the following variables into the Black-Scholes-Merton model: a) but-for implied volatilities (estimated from but-for straddle prices) and b) but-for Tesla stock prices. I have not been asked to opine as to the appropriate but-for ATM-forward straddle prices for Tesla options (and therefore but-for implied volatility) or the but-for price of Tesla common stock, but could calculate the combined impact of the alleged misstatements on Tesla option prices using the method I present in my report if provided with these figures by Dr. Michael L. Hartzmark and/or the finder of fact.
- 16. In summary, on August 7, 2018, following 12:48 p.m., the price of Tesla common stock rose which generally increased the prices of Tesla call options and decreased the prices of Tesla put options. Simultaneously, long-term ATM-forward straddle prices fell significantly as a percentage of the stock price (*i.e.*, implied volatility fell). Given but-for stock prices and but-for implied volatilities, the Black-Scholes-Merton formulas can quantify the impact of but-for stock prices and implied volatilities on all Tesla options traded during the Class Period.
- 17. To reach the above opinions, I have relied on the materials listed in the appendices and have cited in this report. The research and analysis upon which my opinions are based has been conducted by me and the personnel working under my direction and supervision. My conclusions are based on information available to me as of the date of this report. I may review, evaluate, and analyze relevant material that becomes available to me in the future. I reserve the right to amend, supplement, or otherwise modify my findings and conclusions as appropriate.

## 3 BACKGROUND ON EQUITY OPTIONS

## 3.1 General Rights and Terms Concerning Equity Options

18. An option gives the buyer (or "holder") the right – but not the obligation, to buy (in the case of a "call option") or to sell (in the case of a "put option") a particular underlying commodity

or financial instrument ("underlying" or "underlying asset"), at a predetermined price ("strike price" or "strike"), at or until a specified date and time in the future ("expiry date" or "expiry").

- 19. The options relevant to my analyses are stock options, meaning their underlying asset is equity in a publicly traded company Tesla. The underlying asset in question is therefore common stock in Tesla.
- 20. When the holder of an option exercises their right to buy or sell the stock and settle the option, it is said that the buyer "exercises" their right, or the option is "exercised".
- 21. Options can be "in-the-money" ("ITM"), "at-the-money" ("ATM") or "out-of-the-money" ("OTM"). A *call* option is in-the-money when spot price *exceeds* the strike price, at-the-money when the spot price *equals* the strike price, and out-of-the-money when the spot price is *below* the strike price. A *put* option is in-the-money when the spot price is *below* the strike price, at-the-money when the spot price *equals* the strike price, and out-of-the-money when the spot price *exceeds* the strike price. Options will only be exercised when they are in-the-money. <sup>8</sup>
- 22. There are two types of exercise rights, referring to when option holders buy or sell the underlying stock: American options and European options. An American option can be exercised any time up to and including the expiry date. A European option can only be exercised on the expiry date.
- 23. It is not optimal to exercise an American call option early unless the stock pays a substantial dividend Tesla did not during the Class Period and has never declared. But it can be optimal to exercise an American put option on a non-dividend-paying stock early when it is sufficiently deep in-the-money. However, as numerically shown by Heston and Zhou (2000)<sup>10</sup>, the positive impact of the option to early exercise is almost negligible for American put options when compared to European put options with the same specifications.

<sup>&</sup>lt;sup>7</sup> Hull, John C. Option, Futures and Other Derivatives. Pearson Education, 2015 (hereinafter, "Hull"), p. 213.

<sup>&</sup>lt;sup>8</sup> ibid., p. 220.

<sup>&</sup>lt;sup>9</sup> ibid., p. 245-250.

<sup>&</sup>lt;sup>10</sup> Heston, Steve, and Guofu Zhou. "*On the Rate of Convergence of discrete-time Contingent Claims.*" Mathematical Finance, vol. 10, no. 1, 2000, pp. 53-75.

- 24. An option class refers to all options of the same type (*i.e.*, call or put) that have the same underlying stock. An option series comprises all options in a particular class that have the same strike price and expiry date.<sup>11</sup>
- 25. The price of an option contract is also known as the "premium." This is paid by the holder to the writer in consideration for the right to buy or sell the stock. An option is a "derivative" security because its value depends on, *i.e.*, is *derived* from: the value of the underlying asset, in this case a stock. An option's price is determined by the current price of the stock ("spot price" or S), the strike price (K), the time to expiry (T), the volatility of the stock price, the interest rate, and the dividend yield of the stock.
- 26. The holder of an option will use their right to exercise the option when the final payoff is positive. For call options, this occurs when the strike price is below the prevailing stock price on the exercise date and the holder can acquire the stock for less than the spot price. For put options, this occurs when the strike price is above the prevailing stock price on the exercise date, and the holder gets a higher price for delivering the stock to the writer, than how much the stock could be acquired on the market.
- 27. The value of an option is comprised of "intrinsic" and "time value." The intrinsic value of an option is its value if the holder had to immediately decide whether to exercise it or not. For a call option, this is spot minus strike price when an option is in-the-money, or zero if the option is at or out-of-the-money, given by  $\max(S K, 0)$ . For a put option, the intrinsic value is the strike minus the spot price when the option is in-the-money, otherwise zero if the option is at or out-of-the-money, defined as  $\max(K S, 0)$ . An out-of-the-money option has zero intrinsic value as the holder will choose not to exercise the option. 12
- 28. Option time value refers to the portion of an option's premium that is attributable to the amount of time remaining until option expiry. Time value arises from the possibility that the stock price will favorably increase or decrease by the expiration date. For example, it is often optimal for the holder of an in-the-money American option not to exercise before expiry because their

<sup>&</sup>lt;sup>11</sup> Hull, p. 220.

<sup>&</sup>lt;sup>12</sup> ibid.

option has time value.<sup>13</sup>

- 29. American options are always worth at least their intrinsic value as the holder can choose to exercise the option at any time before the expiration date. The holder usually prefers to wait due to their option's time value. For call options, it is only preferable to exercise the option early if stock's dividend exceeds the option's time value. However, for put options, the holder might benefit by exercising early because spot prices have a zero lower bound and they can earn risk-free returns. Imagine the spot price for a stock is \$1, the strike price is \$10, and there is risk-free interest rate. The holder may exercise early, get \$9, and earn risk-free interest on their \$9. The difference between the strike price and stock price can only increase by \$1, so depending on the volatility and risk-free return, the holder may earn more by exercising the option early. Generally, exercising a put option early becomes more attractive as the spot price decreases, the interest rate increases, or volatility decreases. <sup>14</sup>
- 30. For example, if a holder has a call option to buy 100 shares of underlying stock at a strike price of \$60, and the market price for the share is \$70, the option is in-the-money as the share could be sold straight after exercising the option for a profit. Conversely, if a holder has a put option to sell a share for \$60, and the market price for the share is \$70, the option is out-of-the-money because it would not be economical for the holder to sell at the lower price. Whether an option is ITM/ATM/OTM depends on the relevant prevailing market price of the underlying stock. All options additionally have an extrinsic value, a/k/a "time value." Table 1 below provides a summary:

Spot vs Strike	Call Option	Put Option
Spot > Strike	In-the-Money (ITM)	Out-of-the-Money (OTM)
Spot = Strike	At-the-Money (ATM)	At-the-Money (ATM)
Spot < Strike	Out-of-the Money (OTM)	In-the-Money (ITM)

Table 1

31. A physically settled option requires delivery of the stock. For example, if the asset is a

<sup>&</sup>lt;sup>13</sup> ibid.

<sup>&</sup>lt;sup>14</sup> ibid., p. 247.

listed equity, settlement requires transfer of shares to the holder if they exercise the option. Options can also be cash-settled, meaning the writer of the option makes a cash payment to the holder based on the difference between the spot and the strike price.

32. If the holder does not exercise an option, the option position is deemed expired or closed. For exchange traded options, an option position can also be closed if the holder sells an "offsetting option" prior to the expiry date, *i.e.*, the holder buys another option with the opposite position. Conversely the writer of an option can close out the option position by purchasing an offsetting option.

#### 3.1.1 Call Options

- 33. An investor purchases a call option alone when they believe the stock price will increase. A holder will only exercise the option if it is in-the-money. Call options become more valuable as the stock price increases, and less valuable as the strike price increases. Similarly, call options gain value if investors think the volatility of a stock will increase.
- 34. If a holder of a call option exercises their right to buy the stock, the writer is obligated to sell it at the strike price. The holder can then sell the asset at the current market value for a profit.
- 35. Consider a call option with a strike price of \$70 to buy 100 shares in company X. If the stock price is less than \$70 at expiration, the holder will allow the option to expire without exercising it. However, if the share price was \$80 at expiration, the holder will exercise their option, buy at \$70 from the option writer, and then sell at \$80, receiving a payoff of \$10 per share.
- 36. In a call options contract, the holder takes a long position, meaning they anticipate the spot price will rise above the strike price, while the writer takes a short position, believing the spot price will be at or below the strike price.
- 37. If the holder of a call option exercises their right to buy the stock, the proceeds will be the amount by which the asset's price exceeds the strike price. <sup>16</sup> The payoff for call option holder can

<sup>&</sup>lt;sup>15</sup> ibid., p. 214.

<sup>16</sup> ibid.

therefore be calculated as follows (where  $S_T$  is the stock's spot price on the exercise date):

$$\max(S_T - K, 0)$$

38. In determining whether the holder will make a profit, the premium paid also needs to be considered. To break even, the stock's price will need to have increased by at least the premium paid. The net profit for a call buyer can be calculated as follows (where *C* is the call premium):

$$\max(S_T - K, 0) - C$$

39. A call option holder is protected from losses arising from extreme downward movements in prices of the stock, as he/she will let the option expire. As a result, a call option holder's losses are limited to the premium paid for the option contract. The maximum profit is, in theory, unlimited<sup>17</sup>.





Figure 1

40. Writers of call options take a short position on the underlying stock, meaning they believe its price will fall, or at least be less than the strike price. Writers benefit from a short position

<sup>&</sup>lt;sup>17</sup> Note that the usual practice is to ignore the time value of money when showing the gain or loss from options (*See* Hull p. 213).

through the call premium. Like call options, put options also gain value when investors think volatility will rise.

41. The payoff of a short call option position is exactly the opposite of a long call option position. The maximum payoff for a call option writer is the premium received. However, the maximum loss is, in theory, unlimited.



Figure 2

#### 3.1.2 Put Options

- 42. An investor purchases a put option alone when they believe the stock price will decrease. A holder will only exercise the option if it is in-the-money (*i.e.*, the strike price is greater than the asset's current market price). Put options therefore become more valuable as the strike price increases and less valuable as the stock price increases.
- 43. If a holder of a put option exercises their right to sell the stock, the writer is obligated to buy at the strike price. In put options, writer's take a long position on the underlying stock, but a short position on the option itself. Inversely, holder's take a short position on the underlying stock, but a long position on the option itself. This is because the value of the put option rises as the spot price declines, so each party's position on the put option is antithetical to their position on the

underlying stock.

- 44. As an example, consider a European put option with a strike price of \$70 to sell 100 shares in company X, with a premium of \$5 per share. If the stock price is \$80 at expiration, it would not make sense to sell at \$70, and so the option will expire. However, if the share price reaches \$60 at expiration, the holder will exercise the option.
- 45. There are two basic put option positions: a short position (taken by the writer) and a long position (taken by the holder).
- 46. If the holder of a put option exercises his/her right to sell the stock, the proceeds will be the amount by which the strike price exceeds the stock price. On the exercise date, the payout for a put option holder can therefore be calculated as follows:

$$\max(K - S_T, 0)$$

47. In determining whether the holder will make a profit, the premium paid also needs to be considered. The profit for a put option holder can be calculated as follows (where *P* is the put premium):

$$\max\left(K-S_T,0\right)-P$$

48. A put option holder is protected from losses arising from extreme increases in the stock price, as he/she could let the option expire. However, if the stock price remains unchanged at the expiry date, the holder would lose the entire investment, (*i.e.*, the premium paid). The maximum possible benefit for the put option holder is the full strike price, because the spot price will not fall below zero.



Figure 3

49. The payoff of a short put option position is exactly the opposite of a long put option position, and is received by the writer. The maximum profit for a put option writer is the premium received. The writer's maximum loss is bound at the full strike price because the minimum possible spot price is zero (and the strike price minus zero is simply the strike price).

# Put Option Writer Profit

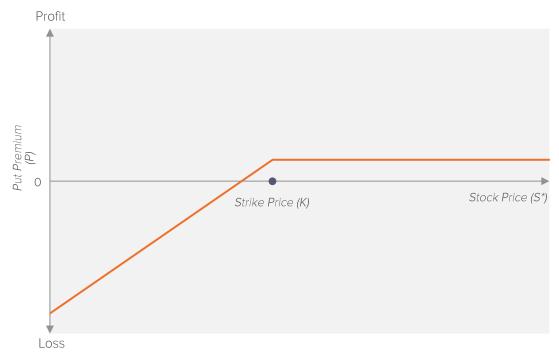


Figure 4

## 3.1.3 Put-Call Parity

- 50. The above graphs demonstrate that calls are bullish and puts are bearish about the underlying price, and the two consequently behave in opposite ways. <sup>18</sup> Payoffs from options trading are a "zero-sum game" when the option holder makes a profit, the option writer loses the equal amount.
- 51. However, options allow both parties to hedge their risk, and so both parties may nonetheless benefit from an options contract. For example, an investor who owns stock in a company may write (sell) a covered call to limit their risk if the stock price declines. Similarly, an investor may buy (hold) a protective put, which they would exercise if the stock price fell.
- 52. "Put-call parity" refers to the relationship between European call options and put options with the same underlying asset, strike price and expiry date. If this equilibrium is violated, an

<sup>&</sup>lt;sup>18</sup> A bullish investor believes a security will gain value, *i.e.*, takes a long position, whereas a bearish investor believes the security will lose value, *i.e.*, takes a short position.

arbitrage opportunity arises, whereby an investor can theoretically earn risk-free profits. 19

53. Put-call parity provides that:

$$C = S + P - PV(K)$$

where,

C is the premium of the European call option with strike price K and expiry T;

P is the premium of the European put option with strike price K and expiry T;

S is the spot price of the current market value of the underlying asset; and

PV(K) is the present value of the strike price K, discounted from the value on the expiry at the risk-free interest rate.

54. The above formula can be alternatively written below. The rewritten formula shows that the price of a call option minus the price of a put option is equivalent to a levered stock position, because either the long call or short put will be exercised, so that this position will inevitably receive the stock and pay the exercise price.

$$C - P = S - PV(K)$$

55. Put-call parity also indicates that owning the present value of the strike price plus the opportunity to exchange it for stock is equivalent to owning the stock plus the opportunity to exchange it for the strike price.

$$C + PV(K) = P + S$$

- 56. Put-call parity implies that call and put prices will be equal when the stock price equals the present value of the strike price. More broadly, it also shows that the time value of a call is equivalent to the time value of the corresponding put.
- 57. When stock prices are higher than the present value of strike price, call options will be inthe-money (with respect to the present value of the strike), and will be worth more than the corresponding out-of-the-money puts, and vice versa. Because of put-call parity, an out-of-the-

<sup>&</sup>lt;sup>19</sup> "Theoretical" in the sense that the market should be liquid enough to allow for arbitrage trades.

money option can be converted into an in-the-money option. Therefore, when pricing option series, one can focus on the cheaper out-of-the-money options, which have no intrinsic value.

58. Put-call parity is complicated by early exercise rights in American options. In the case of Tesla common stock, this is a fringe issue. Call options are only exercised early if the stock pays sufficiently large dividends, however Tesla common stock pays no dividends.<sup>20</sup> Put options might be exercised early despite a lack of dividends if they are sufficiently deep in-the-money, <sup>21</sup> however at no point during the relevant period were a significant number of Tesla put options deep enough in-the-money for early exercise to be optimal, see Section 5.2.

#### **3.1.4** Factors Affecting Option Prices

- 59. Prices for put and call options are affected by six factors:<sup>22</sup>
  - The current (or spot) stock price,  $S_0$ ;
  - The strike price, K;
  - The time to expiration, T, also denoted as T t where T is the expiration date and t is the current date;
  - The implied volatility of the underlying stock price,  $\sigma$ ;
  - The risk-free interest rate, r; and
  - Expected dividends.

60. Implied volatility is distinct from the actual volatility of the underlying stock and is the only variable listed above that is not directly observable. Actual, or historical, volatilities are backward looking, meaning they are based on the previous level of volatility observed in a stock's price movements. Implied volatility, on the other hand, is forward looking, meaning it shows the level of volatility investors expect in the future.<sup>23</sup> It is possible that the historic volatility of a stock is very low, whereas the implied volatility is high. This would occur when investors expect substantial future changes in the stock price. In reality, implied volatility tends to be less variable

<sup>&</sup>lt;sup>20</sup> Tesla's 2017 Annual report, stating "We have never declared or paid cash dividends on our common stock. We currently do not anticipate paying any cash dividends in the foreseeable future." https://www.annualreports.com/HostedData/AnnualReportArchive/t/NASDAQ\_TSLA\_2017.pdf, p.36.

<sup>&</sup>lt;sup>21</sup> Hull, pp. 245-251.

<sup>&</sup>lt;sup>22</sup> ibid., pp. 234-235.

<sup>&</sup>lt;sup>23</sup> ibid., pp. 341-342.

than the price of the option itself.<sup>24</sup>

61. Implied volatility is also a "risk-neutral" measure of volatility, *i.e.*, it looks at the probability of a stock price movement within a distribution, rather than analyzing the risk of a particular stock. In the original Black-Scholes-Merton formulas (see Section 4 for more details), implied volatility is assumed to be constant across stock and strike prices, but other versions of the formula relax this assumption. Throughout this report, wherever I refer to volatility, I mean implied volatility unless otherwise specified.

62. With the exception of time to expiration and implied volatility, put and call options have opposite reactions to each of these variables, summarized below in Table 2.<sup>25</sup>

Variable	Call	Put
Current Stock Price	+	-
Strike Price	-	+
Risk-Free Rate	+	_
Future Dividends	-	+
Time to Expiration	+	+
Volatility	+	+

<sup>&</sup>quot;+" Indicates Positive Impact on Option Value

#### Table 2

63. Recall that the payoff for a call option is how much greater the spot price is than the strike price. Consequently, call options become more valuable as the stock price rises, and less valuable as it declines, all else equal. Call options also lose value with higher strike prices, all else equal.

64. Conversely, the value of a put option falls as the stock price rises, because the payoff on a put option is the amount the strike price exceeds stock price, all else equal. This also means put options are more valuable the higher their strike price is, all else equal. The inverse relationships call and put options have with the stock and strike prices is depicted in the first panel of Figure 5

<sup>&</sup>quot;-" Indicates Negative Impact on Option Value

<sup>&</sup>lt;sup>24</sup> ibid.

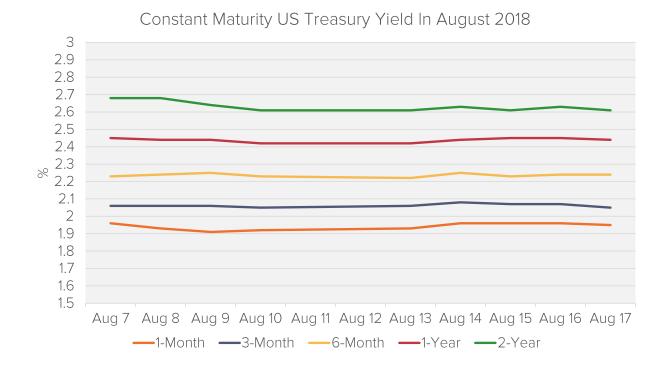
<sup>&</sup>lt;sup>25</sup> ibid., pp. 234-235. Note, when dividends are sufficiently high, exercising an American option early may be profitable despite its time value.

below.

65. Each chart below shows how the value of an option responds to the variable shown on the horizontal axis, holding everything else constant. Values are calculated using the Black-Scholes-Merton formula, detailed in Section 4. I use constants of 30% implied volatility, \$50 strike, \$50 spot, 5% risk-free return, and one period to expiration. *E.g.*, the first plot, titled "Stock Price," shows how the value of an option responds to changes in stock (spot) price between \$0 and \$100, with implied volatility fixed at 30%, a strike price at \$50, risk-free returns at 5%, and one period to expiration. Put/call options have opposite reactions to stock and strike prices.



- 66. Unlike stock and strike prices, both put and call options have a positive relationship with the time to expiration. That is, the longer the time to expiration, the more valuable the options become, all else equal. The more time until the option expires, the greater chance of a favorable price movement.
- 67. The fifth relevant variable is the interest rate. The value of call options increases with the interest rate because, holding the current spot price, or  $S_0$  constant, investors expect the *future* stock price,  $S_{t+1}$ , to increases with the interest rate. This same effect causes the put option value to decline with the interest rate. In reality, interest rates tend not to change significantly over the lifespan of an option. This is especially true for the Class Period see Figure 6 below and Table 10 in Appendix C.<sup>26</sup> As a result, I use a fixed 2.4% interest rate for the calculations in Section 5 and Section 6 of this report. Because of the impact methodology I describe in Section 6.2, the choice of interest rate has little effect on my conclusions.



The constant maturity Treasury yields data was obtained from the Federal Reserve Board database, https://fred.stlouisfed.org/categories/115, Methodology found here, https://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/yieldmethod.aspx

#### Figure 6

68. As depicted in Figure 7 below, implied volatility also raises both put and call option values, all else equal. Put and call options protect their holders from downside risk. The most a holder can ever lose with an option is the premium. However, their upside potential is unlimited in the case of call options, and only limited by zero spot price in put options. Options holders therefore benefit from implied volatility, because they stand to rake in large profits given extreme favorable price movements, but are protected against similarly extreme unfavorable price changes.

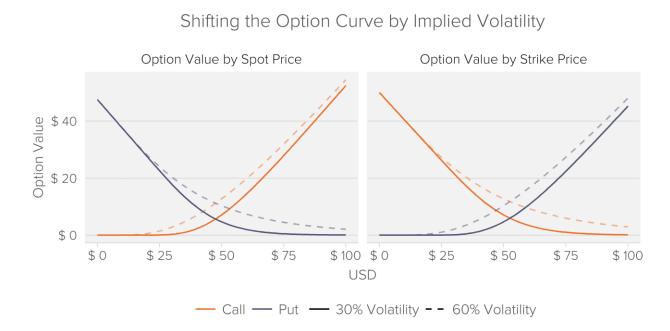


Figure 7

- 69. The relationship between implied volatility and option values is visualized above as a shift from the solid to the dotted lines. An increase in implied volatility shifts the entire option curve up, meaning for *any* given stock or strike price, an increase in volatility raises the option value. This is true for *both* call and put options.
- 70. Option value's sensitivities are also conventionally called option Greeks, because the symbols used to represent the sensitivities of these complex derivatives come from calculus and

use the Greek Alphabet.<sup>27</sup> The following are the most common option Greeks:

vega (or  $\nu$ ) measures impact of a change in volatility in option prices; theta (or  $\Theta$ ) measures impact of a change in time remaining on option prices; delta (or  $\Delta$ ) measures impact of a change in the price of underlying; and gamma (or  $\Gamma$ ) measure impact of rate of change of Delta.

71. Although there are six inputs that are used to calculate the value of option under the BSM model, only two variables change randomly that have a large impact on option value – stock price and implied volatility. Given that other option inputs remain relatively constant overtime, knowing how implied volatility and the underlying stock price changes over time, I can effectively isolate and explain their corresponding impact on option values.

#### **3.2** Option Straddle

- 72. A straddle is a widely applied option strategy and are commonly studied by practitioners and in academia.<sup>28</sup> Notably, the original VIX index was calculated by inverting Black-Scholes-Merton formulas using prices of ATM-forward straddles.<sup>29</sup>
- 73. A "long straddle" is when an investor buys both a call and put option of the same underlying asset, each with the same strike price and expiry date.<sup>30</sup> Investors buy a straddle when they think the stock price will change substantially, but are not sure in which direction, *i.e.*, they think there will be a general increase in volatility of the underlying stock. Straddle holders bet that the implied volatility of the stock will increase.
- 74. A "short straddle" is when an investor sells both a call and put option of the same underlying asset, each with the same strike price and expiry date. In contrast, to a holder of a

<sup>&</sup>lt;sup>27</sup> Vega itself is not a Greek letter, but is denoted by the Greek letter nu (ν). https://corporatefinanceinstitute.com/resources/knowledge/trading-investing/vega-%CE%BD/

<sup>&</sup>lt;sup>28</sup> See for example, Goyal, A. and Saretto, A., 2009. Cross-section of option returns and volatility. Journal of Financial Economics, 94(2), pp.310-326.

<sup>&</sup>lt;sup>29</sup> See Carr, Peter and Liuren Wu. "A Tale of Two Indices." The Journal of Derivatives 13.3 (2006): 13-29. Print.

<sup>&</sup>lt;sup>30</sup> Bodie, Zvi, Alex Kane, and Alan Marcus. *Investments*. McGraw-Hill, 1999, p. 628. (hereinafter, "Investments").

straddle, the straddle writer is betting that the asset's price will remain stable, (i.e., less volatile).

75. Because an option holder's loss risk is bound at the call premium, holders can purchase both a put and call option simultaneously (e.g., a straddle position), and benefit from a large change in the stock price, regardless of the direction. Imagine a holder who buys a straddle, then the stock price increases. They will exercise their call option and allow their put option to expire. When an investor enters into a long straddle, they risk the loss of the value of their premium, but as long as the stock price increases to exceed the sum of the premiums paid to create the straddle (because they purchased two options), they will profit. Similarly, if the stock price declines, the holder will exercise their put option, allowing their call option to expire. If the stock price falls by more than the sum of the premiums (again because they purchased two options and therefore paid two premiums), the holder will make a profit. The straddle strategy relies on the bounded risk of the option holder.

76. A straddle holder's payoff increases regardless of whether the stock price increases or decreases (also known as "delta neutral"), so long as the stock price moves substantially in either direction. The straddle holder's payoff therefore benefits from increased implied volatility. If implied volatility is low and there ultimately no movement in stock price, the holder will lose the premiums paid for both options. While the value of the portfolio at expiry can never be negative, it must still exceed the premiums paid for the holder to make a profit.<sup>31</sup>

77. A long straddle position has unlimited profit potential and a limited loss potential (*i.e.*, the sum of the premiums paid to purchase both the call and put options to create the straddle). The potential payoff and loss for a can by depicted as the following:

<sup>31</sup> ibid.

# Long Straddle Profit

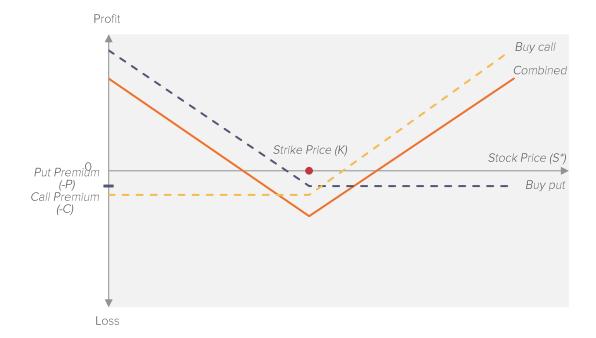


Figure 8

78. Conversely, a short straddle position has unlimited risk (loss) potential in both directions and has a maximum profit potential equal to the sum of the premiums received for selling both the call and put options. The potential payoff and loss for a straddle writer can by depicted as the following:

#### Short Straddle Profit

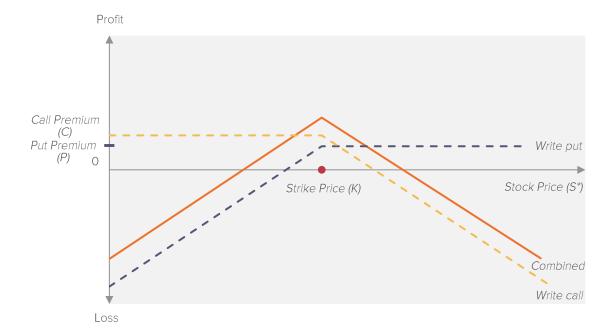


Figure 9

79. Mathematically, the payoff for straddles can be calculated as:

$$max(S_T - K, 0) + max(K - S_T, 0) = \begin{cases} S_T - K, & \text{if } S_T > K \\ K - S_T, & \text{if } K \ge S_T \end{cases}$$

where,

 $S_T$  = Underlying stock price at expiry T

K = Strike price

80. In addition to regular ATM straddles, there are also ATM-forward straddles. An ATM-forward straddle, as opposed to a simple ATM straddle, means the forward (rather than spot) price equals the strike for both option positions in the straddle.<sup>32</sup> Equivalently, the present value of the

<sup>&</sup>lt;sup>32</sup> ATM-forward is the same as ATM, except that the strike price equals the prevailing forward price rather than the prevailing spot price. The forward price is roughly equal to the spot price, but includes storage costs and interest rates. https://onlinelibrary.wiley.com/doi/10.1002/9781118793251.ch4

strike price equals the spot price.

- 81. ATM-forward straddle prices represent the total price of a portfolio of ATM-forward options for a particular maturity. As we will show in section 5.5, a drop in ATM-forward straddle prices means a uniform drop in prices of this portfolio of ATM options.<sup>33</sup>
- 82. According to the Black–Scholes-Merton model,<sup>34</sup> implied volatility of an option can be derived given the price of an ATM-forward straddle, the current stock price, and the time to expiration.<sup>35</sup> This is mainly because the value of a call and put are equal when the underlying stock price equals the present value of the strike.
- 83. ATM options also have the highest time value and vega. Therefore, as discussed in further detail in Section 6.1, by analyzing changes in prices of ATM-forward straddles, I can measure changes in implied volatility.<sup>36</sup>

#### 3.3 Options Markets and Exchange-traded Options

#### 3.3.1 Options Markets

- 84. An option can either be traded on exchanges or off exchange (a.k.a. the over-the-counter or "OTC market").
- 85. In OTC markets, option trades are negotiated through a dealer, and the terms of the option contract can be individually tailored. There are no membership requirements for trading.<sup>37</sup> Counterparty risk (*i.e.*, the risk of the other party to a transaction defaulting on their obligations) is a key factor in OTC markets.
  - 86. Exchange-traded options, as their name indicates are traded on option exchanges such as

<sup>&</sup>lt;sup>33</sup> Hull, pp. 104-131.

<sup>&</sup>lt;sup>34</sup> See Section 4 introducing and discussing the Black–Scholes-Merton model.

<sup>&</sup>lt;sup>35</sup> See Brenner, Menachem, and Marti G. Subrahmanyam. "A Simple Formula to Compute the Implied Standard Deviation." Financial Analysts Journal, vol. 44, no. 5, 1988, pp. 80-83. See also Corrado, Charles J., and Thomas W. Miller Jr. "A Note on a Simple, Accurate Formula to Compute Implied Standard Deviations." Journal of Banking & Finance, vol. 20, no. 3, 1996, pp. 595-603.

<sup>&</sup>lt;sup>36</sup> For simplicity of presentation, future references to straddles, or ATM straddles, means ATM-forward straddles unless otherwise specified.

<sup>&</sup>lt;sup>37</sup> Investments, p. 74.

The Chicago Board Options Exchange ("CBOE").<sup>38</sup> Exchange-traded options use standardized contract terms for strike prices, expiry dates and deliverable specifications. Exchange traded options also settle through an exchange clearing house, who guarantees that options writers will fulfill their obligations under the terms of option contracts and keeps a record of all long and short positions.

#### 3.3.2 Exchange-traded Options – Specifications

- 87. In the United States, some of the exchanges that trade stock options include the CBOE, the Philadelphia Stock Exchange, and the American Stock Exchange.<sup>39</sup> CBOE operates four U.S.-listed cash equity options markets, including the largest options exchange in the U.S. CBOE Options Exchange.
- 88. The CBOE's standard terms for equity options provide that the underlying asset is generally 100 shares for each option contract.<sup>40</sup>
- 89. Strike prices are typically set at 2.5-point intervals when the strike price is between \$5 and \$25; 5-point intervals when the strike price is between \$25 and \$200; and 10-point intervals when the strike price is over \$200.<sup>41</sup>
  - 90. The CBOE's trading hours are 8:30 a.m. to 3 p.m. Central Time.<sup>42</sup>
- 91. The expiration date is the third Friday of the expiration month. The expiration months consist of two near-term months (the current month, plus the following month), and two additional months depending on whether the stock is assigned to the January, February or March cycle. The January expiration cycle uses the first months in each quarter, (January, April, July, October), the February cycle uses the second months in each quarter, (February, May, August, November), and

<sup>&</sup>lt;sup>38</sup> A derivative exchange is a market where individuals trade standardized contracts that have been defined by the exchange. *See* Hull, p. 2.

<sup>&</sup>lt;sup>39</sup> Hull, p. 218.

<sup>40 &</sup>quot;Equity Options Product Specifications." CBOE, available at https://www.cboe.com/exchange\_traded\_stock/equity\_options\_spec/, hereinafter ("Equity Options Product Specifications"), (accessed November 4, 2021).

<sup>&</sup>lt;sup>41</sup> ibid.

<sup>&</sup>lt;sup>42</sup> ibid.

the March cycle uses the third months in each quarter (March, June, September, December). For example, an option issued in March assigned to the January cycle would have available expiration months of March (the current month), April (the following month), and July and October (the next two months after April in the January cycle).<sup>43</sup>

92. The premium is quoted on a per share basis and is stated in decimals, with one point equaling \$100. For example, a quoted price of \$3.00 would result in a total premium of \$300 (\$3 multiplied by 100).

#### 3.3.3 Exchange-traded Options – Clearing and Settlement

93. Given that exchange-traded options are subject to standardized parameters, this permits exchange-traded options to be cleared through a central clearing counterparty. As such, exchange-traded options have no counterparty risk as all exchange-traded options are cleared through a central counterparty, the Options Clearing Corporation ("OCC"). As the issuer of exchange listed options, OCC in effect becomes the buyer to every clearing member representing a seller and the seller to every clearing member representing a buyer.<sup>44</sup>

94. The OCC provides clearing and settlement services to multiple exchanges, including the CBOE. A firm must be a member of the OCC to use its services. In order to protect against member default, the OCC imposes several requirements to qualify for membership. An applicant must: be a broker dealer or futures commission merchant registered with the SEC or Commodity Futures Trading Commission, or a non-U.S. securities firm; have minimum net capital of \$2,500,000; and have qualified staff and adequate facilities to self-clear options.<sup>45</sup> The OCC charges a clearing fee.<sup>46</sup>

95. Clearing is the process by which option trades settle. In the case of shares, this involves physical delivery of the shares to the buyer. A clearinghouse acts as an intermediary between the parties to an option contract, and effectively becomes the "opposite party to every trade," (*i.e.*, the

<sup>&</sup>lt;sup>43</sup> https://www.cboe.com/us/options/trading/codes/.

<sup>44</sup> https://www.cboe.com/investor\_protection/.

<sup>&</sup>lt;sup>45</sup> https://www.theocc.com/Company-Information/Becoming-a-Clearing-Member.

<sup>46</sup> https://www.theocc.com/Company-Information/Schedule-of-Fees.

buyer for the short position and the seller for the long position).<sup>47</sup> Parties on each side of an option contract deal only with the clearinghouse, which acts as the guarantor.<sup>48</sup>

- 96. This arrangement also allows traders to liquidate or terminate an option position at any time before expiry, by issuing an "offsetting" order. For example, an investor with a long position can close its position by selling the option and assuming a short position. The exchange then "nets out" the investor's long and short positions, effectively reversing the trade.<sup>49</sup>
- 97. Investors trade with the exchange and not necessarily with the same buyer and seller in a particular transaction. When an option holder exercises an option, the OCC assigns a member "at random" with a short position in the same option, who must then fulfil the terms of the option. This is known as "assignment."<sup>50</sup>
- 98. Trading volume refers to the number of options contracts that have changed ownership during a particular period, regardless of the actual number of contracts. Trading volume can increase or decrease without a change in the total number of options contracts.
- 99. Exchange traded option volume can also be measured through "open interest." Open interest counts the number of outstanding options contracts, meaning contracts which have not been settled. Open interest counts each contract once, so it could be measured either by the volume of long positions or by the volume of short positions (which must necessarily be equal), but not by the sum of the two. This differs from volume traded as it only accounts for *new* contracts, rather than the exchange of existing contracts. *I.e.*, if two investors agreed to open a new option contract with each other, open interest would rise by one contract. If one of those investors then sold their position to another investor, open interest would be unaffected, but volume traded would rise.<sup>51</sup>

<sup>&</sup>lt;sup>47</sup> https://www.cboe.com/investor\_protection/.

<sup>&</sup>lt;sup>48</sup> Investments, p. 614, p. 695.

<sup>&</sup>lt;sup>49</sup> Investments, p. 695.

https://www.theocc.com/getmedia/0cdda3c2-ab81-450f-b8b8-7ce84d88fce7/standard-assignment-procedures.pdf, (accessed November 8, 2021).

<sup>&</sup>lt;sup>51</sup> Hull, p. 37. *See also* https://www.cftc.gov/MarketReports/CommitmentsofTraders/ExplanatoryNotes/index.htm, (accessed November 2021, 2021).

#### 4 THE BLACK-SCHOLES-MERTON MODEL

# 4.1 Background of Options Theory and the Black-Scholes-Merton Model

100. The start of modern-day option theories goes back to the 1960's when Paul Samuelson<sup>52</sup>, winner of the 1970 Nobel Memorial Prize in Economic Sciences, rediscovered French mathematician Louis Bachelier's work<sup>53</sup> from the 1900's. Aside from Paul Samuelson's own work, some of the key works around the same time include Case Sprenkle<sup>54</sup> and James Boness.<sup>55</sup>

101. The BSM model was the first theoretical mathematical valuation of an option contract. It shows how options react to changes in the underlying stock price, strike price, risk-free returns, implied volatility, and time to expiration.

102. The first BSM model, *The Pricing of Options and Corporate Liabilities*<sup>56</sup> was published by Fisher Black and Myron Scholes in 1973. It was then widely adopted by the financial world. The creation of a sound mathematical framework for option pricing provided legitimacy to option trading and led to a sharp increase in option trading. Around one month after its publication, the CBOE started to trade call options on 16 stocks. Scholes stated that "There were many young traders who either had taken courses at MIT or Chicago in using the option pricing technology. On the other hand, there was a group of traders who had only intuition and previous experience. And in a very short period of time, the intuitive players were essentially eliminated by the more systematic players who had this pricing technology."<sup>57</sup> The early success of this model prompted academics to start working on variations, which were used to price different financial instruments.

103. In 1973, Merton published an equally important version of the model which could account

<sup>&</sup>lt;sup>52</sup> Samuelson, Paul A. "*Rational Theory of Warrant Pricing*." IMR; Industrial Management Review (Pre-1986), vol. 6, no. 2, 1965, pp. 13.

<sup>&</sup>lt;sup>53</sup> Bachelier, Louis. "*Theory of Speculation (Théorie de la Spéculation)*." Annales Scientifiques de l'École Normale Supérieure, Sér 3, 17 (1900), pp. 21-86, translated by D. May.

<sup>&</sup>lt;sup>54</sup> Sprenkle, Case M. "Warrant Prices as Indicators of Expectations and Preferences." Yale Economic Essays, Vol. 1, No. 2 (Fall 1961), pp. 179-231.

<sup>&</sup>lt;sup>55</sup> Boness, James A. "*Elements of a Theory of Stock-Option Value*." Journal of Political Economy, Vol. 72, No. 2 (April 1964), pp. 163-175.

<sup>&</sup>lt;sup>56</sup> Black, Fischer, and Myron Scholes. "*The Pricing of Options and Corporate Liabilities*." Journal of Political Economy, vol. 81, no. 3, 1973, pp. 637-654.

<sup>57</sup> https://www.bbc.co.uk/news/magazine-17866646.

for dividend payments.<sup>58</sup> Merton shows, as discussed in Section 3.1, that an option holder might choose to exercise their option early, despite its time value, when dividends are high enough. Merton's contribution to the literature is equality important despite the fact that the Black-Scholes-Merton model is most commonly referred to as the Black-Scholes or BS model.

104. Since its inception, economists have further generalized the model, but the original BSM model forms the foundation of modern option pricing. The original BSM model nonetheless remains a powerful tool. Multiple academics and papers independently converged to the same formula. For example, Rubinstein (1976) generalized BSM with no hedging arguments and showed the same formulas.<sup>59</sup> The BSM is also a limiting case of Cox, Ross and Rubenstein's binomial model.<sup>60</sup> The academic community converged on the BSM model in the 1970s, and even with the modern adjustments, BSM was instrumental in establishing the current academic paradigm for valuing options.

#### 4.2 BSM Formulas

105. The Black Scholes model allows market participants to price a put or call option with the following equation:

$$C = S_t N(d_1) - K e^{-r(T-t)} N(d_2)$$

$$P = K e^{-r(T-t)} N(-d_2) - S_t N(-d_1)$$

where:

$$d_1 = \frac{\ln \frac{S_t}{K} + \left(r + \frac{\sigma^2}{2}\right)(T - t)}{\sigma\sqrt{T - t}}$$
$$d_2 = d_1 - \sigma\sqrt{T - t}$$

<sup>&</sup>lt;sup>58</sup> Merton, Robert C. "*Theory of Rational Option Pricing*." The Bell Journal of Economics and Management Science, 1973, pp. 141-183. (hereinafter, "Merton 1973").

<sup>&</sup>lt;sup>59</sup> Rubinstein, Mark. "*The Valuation of Uncertain Income Streams and the Pricing of Options*." The Bell Journal of Economics, 1976, pp. 407-425.

<sup>&</sup>lt;sup>60</sup> Cox, John C., Stephen A. Ross and Mark Rubinstein. "*Option Pricing: A Simplified Approach.*" Journal of Financial Economics 7.3 (1979): 229-263. Print.

and:

C, P = call/put option price

 $S_t$  = underlying security market price at time t

T = option expiry

t = current date

K = strike price

r = risk-free interest rate

T - t = time to expiration

 $N(\cdot)$  = cumulative normal distribution probability function

 $\sigma$  = implied volatility of the underlying stock

106. This formula readily offers considerable insight on the factors that influence the price of an option. As an example, keeping the other variables constant, an increase in strike price, and time to expiration tends to decrease the price of a call, while an increase in the price of the asset or its volatility will cause the call option's price to increase. In the case of the strike price and underlying price, the logic behind these relationships is rather simple – an option to buy something for cheap is more valuable than an option to buy something at a higher price. As for the volatility, a higher standard deviation means that there is a higher chance of the stock increasing or decreasing by a large margin. This benefits options holders because they only benefit from the upside, while their losses are capped at zero (if the underlying were to decrease in price, the option would not be exercised)

107. The BSM model also obeys Put-Call Parity explained in Section 3.1.3. For example, when the stock price is zero, price of call option equals zero and when stock price is infinity price of put option is infinity. This can be algebraically derived, as represented below:

$$\begin{split} C &= S_t N(d_1) - K e^{-r(T-t)} N(d_2) = S_t \big( 1 - N(-d_1) \big) - K e^{-r(T-t)} \big( 1 - N(-d_2) \big) \\ &= S_t + K e^{-r(T-t)} N(-d_2) - S_t N(-d_1) - K e^{-r(T-t)} = S_t + P - K e^{-r(T-t)} \end{split}$$

# 4.3 The BSM Model Revolutionized Options Markets

108. Beyond simply describing options markets, the adoption of the BSM model supported development of options markets. The first modern options exchange, the CBOE, opened in Chicago in 1973, the same year Black and Scholes released their seminal paper.

109. As Burton R. Rissman, former counsel for the CBOE stated "Black-Scholes was really what enabled the exchange to thrive. [I]t gave a lot of legitimacy to the whole notion of hedging

and efficient pricing, whereas we were faced, in the late 60s/early 70s with the issue of gambling. That issue fell away, and I think Black-Scholes made it fall away. It wasn't speculation or gambling, it was efficient pricing. I think the SEC [Securities and Exchange Commission] very quickly thought of options as a useful mechanism in the securities markets and it's probably - that's my judgement - the effects of Black-Scholes. I never heard the word "gambling" again in relation to options."<sup>61</sup>

110. Since Black, Scholes, and Merton's original work, variations of the BSM model have proliferated. BSM is a special case of stochastic volatility (see Hull and White (1987),<sup>62</sup> Heston (1993)), and discrete-time GARCH models (see Heston and Nandi (2000)).<sup>63</sup>

#### 4.4 The BSM Model is the Accepted Industry and Academic Standard

111. Because of the fundamental importance of the BSM model for managing risk and laying the foundation of derivatives markets, Robert Merton and Myron Scholes were awarded the 1997 Nobel Memorial Prize in Economics. Fischer Black would also have been a recipient, but he passed away two years prior.<sup>64</sup>

112. In its award, the Nobel Committee stated "Black, Merton and Scholes made a vital contribution" and that they had "developed a pioneering formula for the valuation of stock options." Going on to note "thousands of traders and investors now use this formula every day to value stock options in markets throughout the world." The Black Scholes formula "thus laid the foundation for the rapid growth of markets for derivatives."

113. While many variations of the BSM model have emerged in the decades following its

<sup>&</sup>lt;sup>61</sup> MacKenzie, Donald, Fabian Muniesa, and Lucia Siu, editors. "Do Economists make Markets?: On the Performativity of Economics." Princeton University Press, 2020. p. 64.

<sup>&</sup>lt;sup>62</sup> Hull, John, and Alan White. "*The Pricing of Options on Assets with Stochastic Volatilities*." Journal of Finance, 1987, pp. 281-300. (hereinafter, "Hull and White 1987").

<sup>&</sup>lt;sup>63</sup> Heston, Steven L., and Saikat Nandi. "A Closed-Form GARCH Option Valuation Model." The Review of Financial Studies, vol. 13, no. 3, 2000, pp. 585-625. (hereinafter, "Heston and Nandi 2000").

<sup>64</sup> https://www.nobelprize.org/prizes/economic-sciences/1997/press-release/.

<sup>65</sup> ibid.

<sup>66</sup> ibid.

<sup>67</sup> ibid.

original publication, each author is fundamentally standing on the shoulders of Black, Merton, and Scholes. As the Nobel Committee found, "Their method has more general applicability, however, and has created new areas of research." As Rubinstein states, Black-Scholes option pricing model is the most widely used formula, with embedded probabilities, in human history. 69

# 5 EQUITY OPTIONS ON TESLA COMMON STOCK DURING THE CLASS PERIOD

# 5.1 The Market for Tesla Options was Substantial<sup>70</sup>

114. Tesla options were actively traded during the Class Period and represented a substantial portion of options trading on the CBOE. 2,443 unique Tesla option series were traded during the Class Period on the CBOE, 1,141 of which were call options and 1,302 of which were put options. The strike prices of these option series ranged from \$10 to \$700, and the maturities ranged from August 10, 2018 to January 17, 2020.<sup>71</sup>

115. The underlying shares represented by Tesla options trading were a larger market than Tesla equities trading during the Class Period. As Table 3 shows, during the Class Period, underlying shares represented by Tesla options trading were consistently 1.6-3.6 times the level of Tesla equities trading.

<sup>68</sup> ibid.

<sup>&</sup>lt;sup>69</sup> Rubinstein, Mark. "Implied Binomial Trees." The Journal of Finance 49.3 (1994): 771-818. Print.

For this section, I relied on Option Intervals data for options on Tesla common stock obtained for one-minute intervals from the Cboe Exchange, Inc., Cboe DataShop. I understand that this underlying data is the same as what Michael L. Hartzmark used in his class certification report (Case 3:18-cv-04865-EMC, Document 291). The underlying ticker for the Tesla options considered is "TSLA".

<sup>&</sup>lt;sup>71</sup> In total 17 maturity dates were traded: August 10, 2018; August 17, 2018; August 24, 2018; August 31, 2018; September 7, 2018; September 14, 2018; September 21, 2018; September 28, 2018; October 19, 2018; November 16, 2018; December 21, 2018; January 18, 2019; February 15, 2019; March 15, 2019; June 21, 2019; August 16, 2019; and January 17, 2020.

Date	Volume T	Percent	
	Equities	Options	
07 August 2018	30,875,770	49,975,500	162%
08 August 2018	24,571,163	53,065,900	216%
09 August 2018	17,183,811	50,786,200	296%
10 August 2018	11,552,044	41,118,700	356%
13 August 2018	10,463,881	20,441,200	195%
14 August 2018	6,986,427	18,392,100	263%
15 August 2018	9,101,258	25,218,100	277%
16 August 2018	6,064,033	18,501,100	305%
17 August 2018	18,958,611	59,569,300	314%
TOTAL:	135,756,998	337,068,100	248%

Equities data are from Bloomberg and Options data are from CBOE

Table 3

116. The volume of Tesla call and put options traded during the Class Period was 1,772,322 and 1,598,359 contracts respectively. In total, these transactions represent around 337 million underlying shares or approximately 2.48 times of the trading volume of Tesla shares listed on NASDAQ during the Class Period.

117. The open interest (defined in Section 3.3.3) for all Tesla options that traded was 718 thousand contracts for call options, and 1.3 million contracts for put options.<sup>72</sup> In total, these option open interests represent around 199 million underlying shares or approximately 1.56 times of the average float of Tesla shares listed on NASDAQ during the Class Period.

#### 5.2 Tesla Common Stock Price Movements Affect the Value of Tesla Options

118. As described in detail in Section 3.1.4, changes in the underlying spot price affect option prices. This is not only based on well-documented option theories (*i.e.*, mathematical derivations) but can be clearly and simply observed in Tesla option price data.

119. Almost all stock option formulas are "homogeneous" in the stock price and strike price.

<sup>&</sup>lt;sup>72</sup> Measured as the average open interest for each option series during the Class Period, then summed across all Tesla options series.

This means that when the stock price and strike price increase proportionately, the option value also increases proportionately. By looking at the *ratio* of the spot to the strike price, I show how option values react to the spot price while normalizing for the strike price.

120. Figure 10 below shows the curves of Tesla put and call options with 30 days to maturity on three distinct dates by their strike price.<sup>73</sup> These curves clearly follow the same shape, but are shifted to different levels. The key factor explaining these differences is the stock price on each date. A higher stock price shifts the call option curve up, but the put option curve down, at any given strike price.

# Comparison of Options With 30 Days to Maturity \$250 \$200 **Option Premium** \$150 \$100 \$50 \$0 \$100 \$200 \$300 \$400 \$500 Strike Price May 23, 2018 Aug 08, 2018 Feb 06, 2019

Figure 10

121. Figure 11 below shows Tesla option premiums and spot prices divided by their strike prices.<sup>74</sup> It demonstrates that option curves are relatively stable on different days. In other words, most movements in option prices divided by their strike prices are caused by movements in

<sup>&</sup>lt;sup>73</sup> For details on the construction of Figure 10, see Appendix E, Section 11.9.

<sup>&</sup>lt;sup>74</sup> For details on the construction of Figure 11, see Appendix E, Section 11.9.

underlying stock prices (*i.e.*, move along the option curves) unless the entire option curve shifts (*i.e.*, a change in implied volatility).

122. Both curves demonstrate that an increase/decrease in underlying prices commensurately increases/decreases prices of call/put options, regardless of expiry or time to maturity.

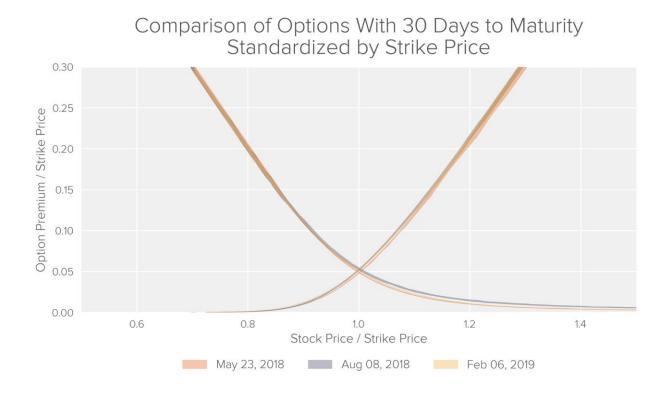


Figure 11

123. Moreover, Figure 11 shows that, once the stock price has been standardized on any given date by the strike price, the option curves for Tesla are uniform. Thus, any change in Tesla stock prices can be uniformly translated into changes in option prices, by moving along the option curves.

#### 5.3 Most Tesla Options were Traded Near-the-Money – Implied Volatility is Quantifiable

124. During the Class Period, Tesla options with strikes within a 20% range of the underlying price accounted for 85% of the trading volume.<sup>75</sup> Figure 12 and Figure 13 below illustrate this

<sup>&</sup>lt;sup>75</sup> 85% as measured by option values, e.g., premium-intrinsic value. See Appendix C.

observation for two example expiries.<sup>76</sup> These examples are representative of all maturities that traded during the Class Period.<sup>77</sup>

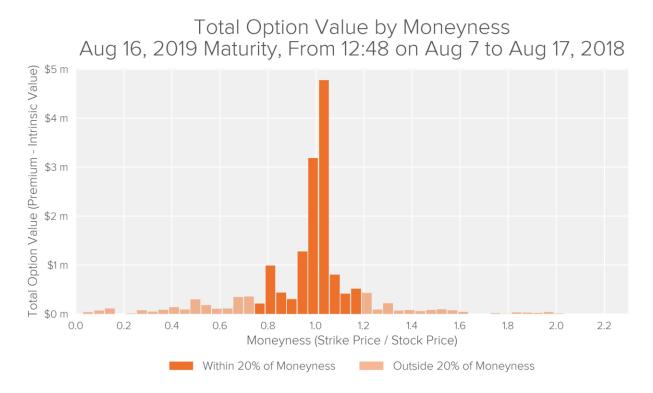


Figure 12

<sup>&</sup>lt;sup>76</sup> For details on construction of Figure **12** and Figure **13**, *see* Appendix E, Section 11.6.

<sup>&</sup>lt;sup>77</sup> Appendix C shows the percent of options traded within 20% of the money for each expiration date traded during the period of 12:48 p.m. on August 7 to the close of trading on August 17, 2018. For the shortest maturing options, *e.g.*, those expiring August 10, 2018, 99.96% of options were traded within 20% of the money. Throughout all maturities, at least 63.21% were traded near-the-money, *see* the June 21, 2019 expiry.

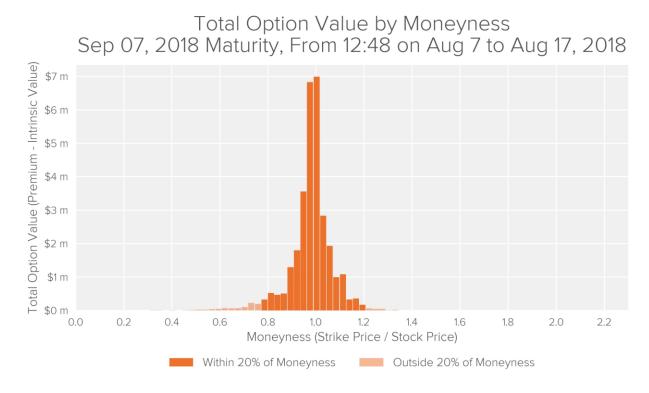


Figure 13

125. It is suboptimal to exercise American options early unless they are deep in-the-money puts. Figure 12 and Figure 13 above show that most Tesla options are traded near-the-money. For these options, any early exercise premium is tiny, and insensitive to stock or volatility movements – *see* Section 3.1. Therefore, we can apply the BSM option formulas to approximate the values of these options.<sup>78</sup>

126. During the Class Period, Tesla stock price rose from around \$356.79 to \$385.93 and then closed at \$305.5 on August 17, 2018. Therefore, options that were near-the-money before the Class Period most likely stayed near-the-money throughout. Empirically, most Tesla options were traded within 20% of the money, as shown in Figure 12 and Figure 13, during the Class Period.

127. The intrinsic value of an option falls to zero as the stock price approaches the strike price. The remaining value of the option is therefore its time value. Time value is determined by implied

<sup>&</sup>lt;sup>78</sup> Mathematically, the BSM model only applies options that do not have early exercise right (*i.e.*, European options). Tesla options are American options (with early exercise right embedded) but the vast majority of Tesla options were too close to the money for it to make sense to exercise early. Therefore, the BSM model can be applied.

volatility and time to maturity. Of these, only implied volatility is truly variable, as maturity is built into the options contract. ATM-forward straddles are therefore neutral with respect to the underlying stock price movements, and any value they have is indicative of the time value of these options (*i.e.*, implied volatility of the stock).

128. Put-call parity holds for ATM options, and I can consequently use ATM-forward straddle prices to calculate implied volatility (because the entirety of their value is time value), as shown in Section 6.1. This allows me to evaluate the impact of implied volatility on options prices, while controlling for spot and strike prices. I explain this process in more detail in Section 5.5.2.

#### 5.4 Long-Term ATM-forward Straddle Prices Fell on August 7, 2018

129. Unlike changes in the underlying stock price, a decline in implied volatility affected call and put options alike – as measured by the prices of ATM-forward straddles as a proportion of the stock price. Sections 3.2 and 6.1 explain that ATM-forward straddles can be used to accurately and reliably calculate implied volatility over time. These positions are neutralized against fluctuations in the underlying stock price (*i.e.*, delta neutral). Instead, they are increasing functions of implied volatility. ATM-forward straddles have zero intrinsic value by definition and measure the pure time value. In the BSM model, ATM-forward straddles are approximately proportional to implied volatility and to the square-root of time to maturity.

130. As shown in Figure 14 below,<sup>79</sup> the price of long-term ATM-forward straddles (which represent implied volatility) dropped sharply after 12:48 p.m.<sup>80</sup>

<sup>&</sup>lt;sup>79</sup> For details on construction of Figure 14, see Appendix E, Section 11.4.

<sup>&</sup>lt;sup>80</sup> On August 7, 2018, at approximately 2:08 p.m., Nasdaq issued a trading halt on Tesla common stock that lasted until approximately 3:45 p.m., https://www.cbsnews.com/news/elon-musk-proposes-taking-tesla-private-sending-share-prices-soaring/. The break in the graphed lines on the afternoon of August 7 reflects the halt of the trading in the CBOE data.

### Price of Standardized ATM-Forward Straddles

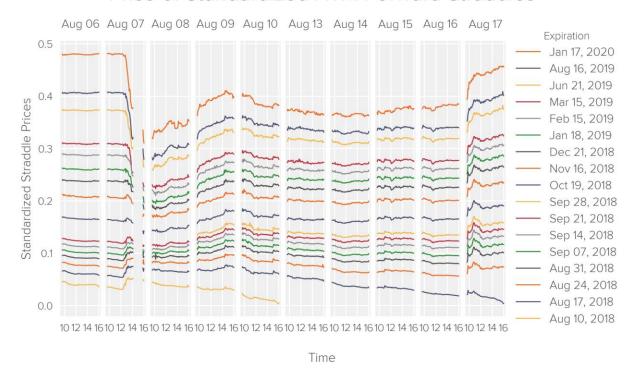


Figure 14

131. Based on Figure 14, I distinguish between short and long-term Tesla options based on which options depreciated following 12:48 p.m. on August 7, 2018, and which appreciated, or were at least constant. I define "long-term" Tesla options as those expiring on or after October 19, 2018. Figure 14 depicts that there is notable decline in the long-term Tesla options ATM-forward straddle prices following 12:48 p.m. Short-term" Tesla options are those expiring on or before September 28, 2018, which saw flat to moderately increasing ATM-forward straddles following 12:48 p.m. Samples 12:48 p.m. Sampl

132. Short-term options depend on immediate information releases to gain value, while long-term options pay a premium for the possibility that new information will come out over a longer period. Short-term options benefit from news released shortly before their exercise date. Long-

<sup>&</sup>lt;sup>81</sup> Long-term expiries include: October 19, 2018; November 16, 2018; December 21, 2018; January 18, 2019; February 15, 2019; March 15, 2019; June 21, 2019; August 16, 2019; and January 17, 2020.

<sup>&</sup>lt;sup>82</sup> For details on construction of Figure 15, See Appendix E, Section 11.3.

<sup>&</sup>lt;sup>83</sup> Short-term expiries include August 10, 2018; August 17, 2018; August 24, 2018; August 31, 2018; September 7, 2018, September 14, 2018; September 21, 2018; and September 28, 2019.

term options instead lose value from a reduction in long-term volatility and the ensuing reduction in long-term payout prospects. This is consistent with ATM-forward straddle price movements on August 7, 2018.

133. Figure 15 below constructs the prices of ATM-forward Tesla straddles using constant time to maturity at each point during the Class Period.<sup>84</sup> The prices shown are also standardized by dividing the straddle prices with the corresponding strike prices. It similarly shows that the 1-year, 180-day, and 90-day options lost value following 12:48 p.m., while shorter term options (30 days or less to expiry) slightly gained.

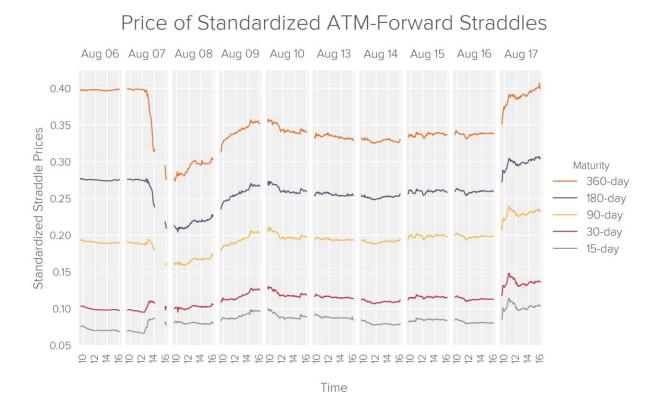


Figure 15

134. This drop in long-term option prices is consistent with the academic literature on merger and buyout announcements. Following a merger or buyout announcement, stock prices usually rise while option prices fall. Bester, Martinez, and Rosu (2011) examined the impact of mergers on

<sup>&</sup>lt;sup>84</sup> There are no "constant maturity" options. Figure 15 shows a floating portfolio that is continually adjusted to show ATM-forward straddles that are 15, 30, 90, 180, and 360 days to maturity respectively. For details *see* Appendix E, Section 11.3.

options values to show that "the Black–Scholes implied volatility decreases when the deal is close to being successful: a success probability close to one leads to an implied volatility close to zero." Similarly, Brown, Barone-Adesi, and Harlow (1994) argue that "an informationally efficient option market would predict that the volatilities implied for a target firm must decline for options with successively longer expiration dates if the market ultimately expects the deal to consummated." 86

135. This *exact* pattern is visible in the Tesla options data. Following 12:48 p.m., the longest maturing options lost the most value and recovered the slowest, while the very short-term options saw little effect. This could indicate both that the Tesla options market was informationally efficient, and that the market, at least initially, viewed Musk's tweet "Am considering taking Tesla private at \$420. Funding secured." and any other alleged misstatements as credible.

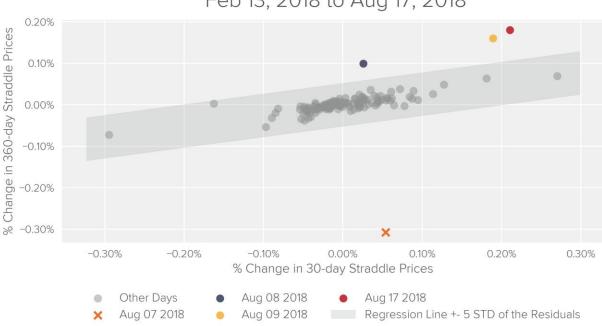
136. Figure 16 below shows the relationship between changes in price on short-term (30 days) versus long-term (360 days) Tesla ATM-forward straddles.<sup>87</sup> The grey points show the previous relationship between changes in long- and short-term straddles in the six months leading up to August 7, 2018. The colored points show days in the Class Period that deviate significantly from the previously observed relationship between short and long-term ATM-forward straddle returns.<sup>88</sup>

<sup>85</sup> Bester, C. A., Victor H. Martinez, and Ioanid Roşu. "Option Prices and the Probability of Success of Cash Mergers.", forthcoming, Journal of Financial Econometrics.

<sup>86</sup> Brown, Keith C., Giovanni Barone-Adesi, and W. V. Harlow. "On the use of Implied Volatilities in the Prediction of Successful Corporate Takeovers." Advances in Futures and Options Research, vol. 7, 1994, pp. 147-165.

<sup>&</sup>lt;sup>87</sup> For details on construction of Figure **16**, see Appendix E, Section 11.5.

<sup>&</sup>lt;sup>88</sup> See further details on "normal" relationship in the ensuing discussing of t-statistics.



Daily % Changes Standarized ATM-Forward Straddle Prices Feb 13, 2018 to Aug 17, 2018

Figure 16

137. Figure 16 demonstrates a substantial and significant departure in the relationship between long-term and short-term ATM-forward straddles on four days: August 7, 2018; August 8, 2019; August 9, 2018; and August 17, 2018. Figure 16 demonstrates that August 7, 2018, August 8, 2018, August 9, 2018, and August 17, 2018, were the largest four outliers of the stable relationship between long-term and short-term ATM-forward straddle price movements on a daily level, when compared to all other days February 13, 2018 to August 17, 2018. Moreover, the deviations on these days were statistically significant at all conventional confidence levels (*e.g.*, above 99%). 89

138. On August 7, 2018 the large long-term ATM-forward straddle price *decreases* accompanied large short-term ATM-forward straddle price *increases*. This movement was not observed during

<sup>&</sup>lt;sup>89</sup> The t-statistic values are 22.00 on August 7, 2018, 9.01 on August 8, 2018, 7.97 on August 9, 2018 and 7.05 on August 17, 2018. T-statistic is a type of inferential statistic used to determine if there is a significant difference between the mean of two groups that may be related. For details on this regression, *see* Appendix E, Section 11.8.

the six-month periods prior to or after August 7, 2018.90

139. Between August 8 and August 17, 2018, long-term straddle prices grew more than anticipated from their previous relationship with short-term straddle prices. This pattern was unusual compared to the previous six months of returns. It was not until August 17, 2018 that the relationship between short- and long-term straddles returned to the normal levels observed historically.

140. This pattern shows a clear divergence between short- and long-term implied volatility that was not observed in the daily observations in the six months before and after before August 7, 2018. The absence of similar prior movements further reinforces that the observed movements on the afternoon of August 7, 2018, were unusual. Figure 16 shows day-to-day movements, but as I show below, on August 7, 2018, the unusual movements in ATM-forward straddle prices began specifically after 12:48 p.m. on August 7, 2018.

141. Figure 16 further indicates that the drop in long-term implied volatility was not due to market-wide forces, but rather was specific to Tesla. The short-term ATM-forward straddles serve as a control group for the long-term straddles. Were there an event that reduced implied volatilities across the entire options market, or even just the automotive options market, this should have been reflected in the short-term Tesla options data. Instead, long-term volatility fell by a statistically significant amount while short-term volatility was comparatively constant.

142. Further, I observe that up until the minute of the tweet, ATM-forward straddle prices were almost perfectly flat across all but the shortest-term options on the morning of August 7, 2018. Between 12 p.m. and 12:30 p.m., the shortest-term options gained value, but there were no perceptible movements in long-term straddle prices. Immediately following 12:48 p.m., long-term straddle prices began to fall.

143. Further, the ATM-forward straddle prices during the morning of August 7, 2018 were

<sup>&</sup>lt;sup>90</sup> Figure 16 only shows the prior six months, but the regression detailed in Appendix E, Section 11.8 additionally analyzes the following six months.

<sup>&</sup>lt;sup>91</sup> Figure **16** shows observations for the six months before August 7, 2018, however I also ran a regression for both the six months before and the six months after August 7, 2018 (detailed in Section 11.8) which similarly shows that these dates were a statistically significant departure from the norm.

perfectly flat for long-term options (defined above). Figure 17 zooms in from Figure 14 to show ATM-forward straddle prices on August 6 and August 7, 2018.<sup>92</sup> During trading on August 6 and the morning of August 7, 2018, long-term ATM-forward straddle prices saw no significant movements, however immediately after 12:48 p.m. on August 7, 2018, their prices began to fall.

### Price of Standardized ATM-Forward Straddles

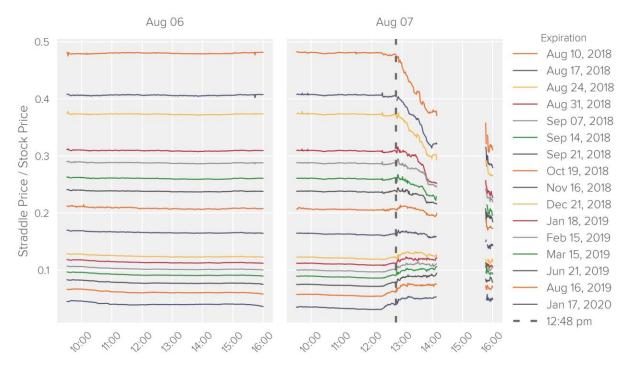


Figure 17

144. As demonstrated above in Figure 14 and Figure 15, long-term option values fell on August 7, 2018. Figure 17 further shows that this drop occurred immediately after 12:48 p.m. on August 7, 2018. As a result of general movements in a stock price from day to day, a straddle that is ATM one day will not be ATM the next, particularly when there are large movements in stock price like those that occurred on August 7. I therefore standardized these figures by the stock price and reconstruct the portfolio of ATM-forward straddles based on which options were ATM-forward at each point in time. This is useful because it allows me to cancel out the impact of the stock price movement on the ATM-forward straddles and focus on implied-volatility, but does not show the

<sup>&</sup>lt;sup>92</sup> For details on the construction of Figure 17, see Appendix E, Section 11.4.

<sup>93</sup> Trading day starts at 9:30 a.m. Eastern Time.

simple change in price that occurred between August 6 and August 17, 2018.

145. I therefore also compared the overnight returns on an ATM-spot straddle that an investor could purchase at 12:47 p.m. on August 7, 2018 to the close of trading for each day during the Class Period. This shows how the prices of ATM-spot straddles purchased at 12:47 p.m. changed during the Class Period. Table 4 reflects this analysis:<sup>94</sup>

Date	 Expiring March 15, 2019			Expiring Jan 17, 2020		
	Price	Return		Price	Return	
Aug 07, 2018 12:57	\$ 108.90		\$	167.95		
Aug 07, 2018 16:00	\$ 89.95	-17.40%	\$	121.28	-27.79%	
Aug 08, 2018 16:00	\$ 93.28	3.70%	\$	131.30	8.27%	
Aug 09, 2018 16:00	\$ 101.50	8.82%	\$	139.93	6.57%	
Aug 10, 2018 16:00	\$ 99.23	-2.24%	\$	136.00	-2.81%	
Aug 13, 2018 16:00	\$ 97.40	-1.84%	\$	129.70	-4.63%	
Aug 14, 2018 16:00	\$ 94.65	-2.82%	\$	126.02	-2.83%	
Aug 15, 2018 16:00	\$ 92.83	-1.93%	\$	127.13	0.87%	
Aug 16, 2018 16:00	\$ 92.35	-0.51%	\$	128.93	1.42%	
Aug 17, 2018 16:00	\$ 103.90	12.51%	\$	144.90	12.39%	

Table 4

146. Table 4 shows change in portfolio value for a hypothetical investor who bought ATM-spot straddles expiring March 15, 2019, and January 17, 2020, at 12:47 p.m. Their ATM-spot straddle expiring March 15, 2019, lost 17.40% value overnight. Their option expiring January 17, 2020, instead lost 27.79% overnight. This difference (17.40% versus 27.79%) shows that the impact on investors scales with the time to maturity. In other words, the longer term an option was, the more its price fell on the afternoon of August 7, 2018.

<sup>&</sup>lt;sup>94</sup> For details on the construction of Table 4, see Appendix E, Section 11.14.

<sup>&</sup>lt;sup>95</sup> The ATM-spot straddle expiring March 15, 2019 traded at \$108.90 at 12:57 p.m. on August 7, 2018, but fell to \$89.95 by the close of trading August 7, 2018.

<sup>&</sup>lt;sup>96</sup> The ATM-spot straddle expiring January 17, 2020 traded at \$167.95 at 12:57 p.m. on August 7, 2018, and fell to \$121.28 by the close of trading August 7, 2018.

# 5.5 The Decrease in Long-term Implied Volatility Beginning after 12:48 p.m. on August 7, 2018 Affected Long-term Tesla Options of All Moneyness

#### 5.5.1 Long-Term Option Values Diverged on August 7, 2018

147. As illustrated in Section 5.2, option curve movements are typically small, and result in parallel shifts that graphically appear overlapping rather than intersecting. Figure 18 provides an example of the parallel shifts of the option curves for Tesla options with a January 17, 2020 expiry between four dates.<sup>97</sup>



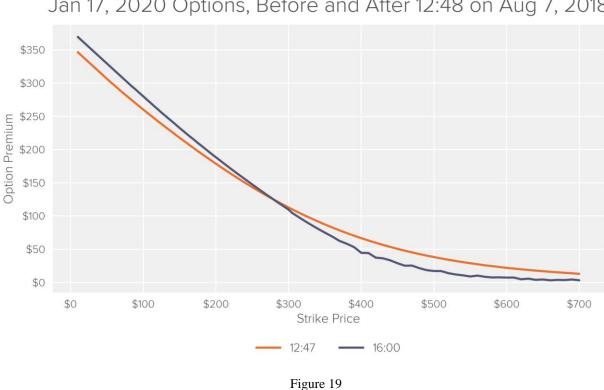
Jan 17, 2020 Options Across Different Days

Figure 18

148. This parallel shift, however, was not observed after the increase in Tesla stock price following 12:48 p.m. on August 7, 2018. Rather, given the impact of implied volatility shifts on the options pricing, the options curve tilted near the spot price of Tesla stock. The shift between August 6, 2018 and August 7, 2018 consequently shows an unusual pattern where ITM call option prices increased, but OTM call option prices decreased.

<sup>&</sup>lt;sup>97</sup> For details on construction of Figure 18, see Appendix E, Section 11.10.

149. Figure 19 shows how the call options curve (as a function of strike price) changed before and after 12:48 on August 7, 2018. The curve inflected around at-the-money call options (where strike price equals stock price). This change cannot be explained by changes in the stock price alone. As previously established, when holding all else constant, call options will gain value given an increase in the underlying stock price. The fact that OTM options prices decreased demonstrates that something beyond stock price was impacting the price of the OTM options on August 7, 2018. Specifically, this chart demonstrates that there are two countervailing effects on August 7, 2018: the increase in Tesla's stock price and the decrease in the implied volatility for the January 17, 2020 expiry.



Jan 17, 2020 Options, Before and After 12:48 on Aug 7, 2018

150. In Figure 19, the option curves were constructed using actual option data. In Figure 20, the option curves are fitted by the BSM model. A comparison of Figure 19 and Figure 20 shows that the BSM model captures/reflects the movement/change very well – or similar. 98

<sup>&</sup>lt;sup>98</sup> For details on the construction of Figure 19, see Appendix E, Section 11.11. For details on the construction of Figure 20, see Appendix E, Section 11.13.

# Black-Scholes Call Option Curves - Jan 17 2020 Expiration Before and After 12:48 on Aug 7 2018

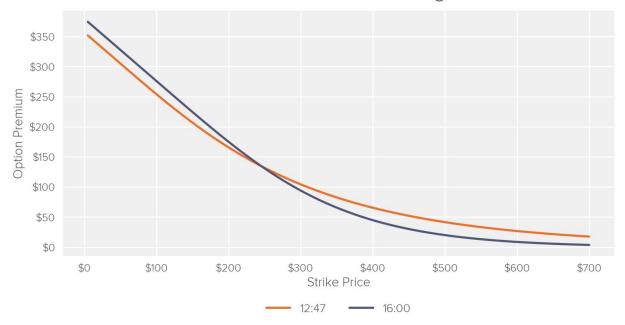


Figure 20

151. Figure 21 plots the exact same data as Figure 19 (which shows the shift from before and after 12:48 p.m. on August 7, 2018). It normalizes option prices by dividing them by their strike prices (*i.e.*, showing moneyness on the horizontal axis).<sup>99</sup> After accounting for the change in the stock price on August 7, 2018 after 12:48 p.m., Figure 21 illustrates that the entire options curve dropped due to the decline in implied volatility for the January 17, 2020 expiry:

<sup>&</sup>lt;sup>99</sup> For details on construction Figure 21, see Appendix E, Section 11.11.



Figure 21

152. The yellow dots are at-the-money \$340 strike call options with an initial midpoint value of \$92.08. This midpoint subsequently *fell* to \$81.05 by the close of trading August 7, 2018, while the stock price *rose* from \$356.94 to \$379.58. Because of the decline in implied volatility, some call options actually lost value despite the rise in stock price. Even some options that were at-the-money at 12:47 p.m. lost value after 12:48 p.m. on August 7, 2018.

153. This effect is starker for the out-of-the-money call options. The red points show an out-of-the-money call option with \$450 strike. This option fell in value from \$50.58 to \$28.90. Long-term call options of all moneyness were negatively impacted by the drop in implied volatility, though for in-the-money options this was all or partially offset by a rise in the stock price. The larger a call option's strike price on August 7, 2018, the more it lost value after 12:48 p.m.

# 5.5.2 Implied Volatility Dropped, Causing All Long-Term Options to Lose Value

154. Section 5.2 established that option curves are *typically* stable and shift in parallel. In other words, changes in implied volatility affects option prices of all moneyness.

155. Section 5.4 further showed that long-term implied volatilities fell in the afternoon immediately following 12:48 p.m., while short-term implied volatilities rose or stayed flat. This movement was unique in the sense that it was not observed anywhere other than August 7, 2018 over Tesla option's data six month before and after August 7, 2018.

156. In Figure 22 and Figure 23, below, the decrease in implied volatility examined in Section 5.4 is graphically represented by option curves for puts and calls for the January 18, 2019 and January 17, 2020 expiries. They show the shift in implied volatility measured during the five minutes before (back to 12:43 p.m.) and the final five minutes of the trading day. The difference between the curves between these two periods shows that the decrease in implied volatilities lowered long-term option prices across *all* stock and strike prices (or alternatively moneyness). Simply put, the decrease in implied volatility between these two periods shifted the entire option curve down.

157. Figure 22 shows observed Jan 18, 2019 expiry Tesla option curves five minutes before 12:48 p.m. for options expiring January 18, 2019 and five minutes before closing on the same day. Each point on the chart represents an actual transaction while the shaded area around the transaction represents the average bid-ask spread around the time of transaction.

158. Long-term Tesla option curves fell during intraday trading on August 7, 2018. This was accompanied by a clear expansion in the bid-ask spread on these options. However, even accounting for an expansion of the bid-ask spreads, the curve still clearly fell across strike and stock prices.

<sup>&</sup>lt;sup>100</sup> For details on construction of Figure 22 and Figure 23, see Appendix E, Section 11.7.



Figure 22

159. This effect occurred across all options with a long-term maturity. For example, Figure 23 shows precisely the same downward shift in the option curve, but for options expiring January 17, 2020 – one year later.



Figure 23

- 160. Because all the curves are taken from the same day, one before and one after 12:48 p.m., these shifts cannot be explained by changes in time to expiration or risk-free returns.
- 161. Furthermore, because the curves all control for shifts in the underlying stock price by dividing the strike prices by the spot price, these shifts cannot be explained by changes in stock price. Therefore, pursuant to the BSM model, the only factor that is impacting the curves in the Figure 22 and Figure 23, is changes in implied volatility.

### 6 THE BSM MODEL CAN CALCULATE COUNTERFACTUAL OPTION PRICES

- 162. In this section, I present a reliable, reasonable, and robust methodology to calculate the impact on option prices given changes in underlying stock price and implied volatility.
- 163. In general, there are two ways to calculate the impact on traded options. One possibility is to calculate a unique but-for price, and then compare that to the transacted price. Another is to calculate an impact quantum, *i.e.*, a dollar or percentage amount by which an option would have been more or less expensive.

164. In my methodology, I utilize an impact quantum to calculate the difference between option prices based on actual option transactions and the calculated price for an option using a counterfactual stock price and implied volatility. Choosing a quantum over a simple but-for price has two main benefits.

- a. It allows me to account for differences in outcomes investors experienced in the real world. Following 12:48 p.m. on August 7, 2018, the bid-ask spread of traded Tesla option values grew, so some investors, either by happenstance or acumen, achieved better prices. By applying an impact quantum, I can equitably show the difference in the amount of option price paid or received as compared to a counterfactual price across investors regardless of their independent and individual circumstances. I discuss this more in detail in Section 6.3; and
- b. It allows me to difference out potential model fitting biases in the levels. Like all models, the BSM model and its extensions have biases in the levels. If I were to simply calculate a but-for price, the impact could vary based on which model I used. We apply the BSM model with a robust methodology that measures *changes* in value, thereby differencing out potential biases in levels.

165. For each Tesla option traded, I can calculate an impact quantum using the BSM model<sup>101</sup> as follows:

- a. First, I find the price of the ATM-forward straddle that has the same expiry and transaction date as the option in question, and calculate the implied volatility using the BSM formulas. I refer to this calculated implied volatility as the "Actual Implied Volatility."
- b. Second, using the Actual Implied Volatility and the actual spot price of Tesla stock at the time of the option transaction in question (the "Actual Underlying Price"), I

For the purpose of this report, I have chosen the BSM model to construct option curves. Dumas, Fleming and Whaley (1998) have shown that the overparametrized Implied Binomial Tree approach predicts option price changes worse than Black-Scholes one week out of the data sample. They also show that Practitioner Black-Scholes models do not provide important improvement over the BSM model in calculating option prices. See Dumas, Bernard, Jeff Fleming, and Robert E. Whaley. "Implied Volatility Functions: Empirical Tests." The Journal of Finance, vol. 53, no. 6, 1998, pp. 2059-2106.

construct a re-valued BSM option curve (the "Actual BSM Option Curve"). I then locate the option in question on the Actual BSM option Curve to find its value. I refer to this as the "Re-Valued Fitted Option Value."

- c. Third, using the but-for implied volatility and but-for Tesla stock price at the time of the option transaction in question, I construct a but-for option curve the "But-for BSM Option Curve." I then locate the option in question on the But-for BSM Option Curve to show its but-for value the "But-for Fitted Option Value."
- d. The impact quantum for the option in question is the difference between Re-Valued Fitted Option Value and But-for Fitted Option Value.

166. Table 5 below provides an example of how the impact quantum on Tesla option prices is calculated for call and put options traded at 9:34 a.m. on August 8, 2018, with a January 17, 2020 expiry and \$400 strike price. If we assume that the 50.52% BSM model implied volatility on August 7, 2018, at 12:47 p.m.<sup>102</sup> is the counterfactual implied volatility (the but-for implied volatility) and \$305.50 is the counterfactual Tesla stock price (the but-for price of Tesla common stock), the impact quantum calculates that the call option is \$11.91 less valuable and a put option is \$54.54 more valuable.

PAGE 57

<sup>&</sup>lt;sup>102</sup> As listed in Table 6.

Variable	Illustrative Impact Example Option Value								
		Re-Valued		But-For	Impact				
Trade Date		Aug 8, 2018 09:34		Aug 8, 2018 09:34	-				
Expiry Date		Jan 17, 2020		Jan 17, 2020	-				
Days to Expiration		527		527	-				
Assumed Interest Rate		2.4%		2.4%	-				
Tesla Price	\$	371.95	\$	305.50	\$ - 66.45				
Forward Tesla Price	\$	385.08	\$	316.28	\$ - 68.80				
Strike	\$	400.00	\$	400.00	\$ -				
BSM Implied Volatility		37.08%		50.52%	13.45%				
BSM Call price	\$	59.89	\$	47.98	\$ - 11.91				
BSM Put price	\$	74.30	\$	128.84	\$ 54.54				

Table 5

#### 6.1 Measuring Implied Volatility Using ATM-forward Straddle Prices

167. Based on the BSM model, I can precisely quantify the BSM implied volatility using the price of ATM-forward straddles across a range of option maturities. Specifically, the algebraic calculation shows that:

$$\sigma = \frac{2 * N^{-1} \left(\frac{Y}{4} + 0.5\right)}{\sqrt{\frac{T - t}{365}}}$$

where:

Y = price of ATM-forward straddle, as a fraction of underlying price at time t

T = option expiry

T - t = time to expiration measured in calendar days

 $N^{-1}(\cdot)$  = inverse function of cumulative normal distribution probability function

 $\sigma$  = implied volatility of the underlying

168. To illustrate, the ATM-forward Jan 17, 2020 expiry Tesla straddle was worth 48.15% of the underlying stock price at the close of trading on August 6, 2018, which corresponds to an annualized BSM implied volatility of 50.91%. At close of trading of August 7, 2018, the same straddle was worth only 31.06% of the new stock price, which corresponds to a BSM volatility of 32.57%.

169. I apply this formula to the close of trading standardized ATM-forward straddle prices for each maturity traded during the Class Period shown in Table 8 in Appendix C. The result is shown in Table 6 below and repeated in Appendix C.<sup>103</sup>

	BSM Implied Volatility										
Maturity Date	At Close	12:47	At Close								
	06-Aug	07-Aug	07-Aug	08-Aug	09-Aug	10-Aug	13-Aug	14-Aug	15-Aug	16-Aug	17-Aug
Aug 10, 2018	43.19%	53.65%	66.99%	61.90%	70.04%	NA	NA	NA	NA	NA	NA
Aug 17, 2018	41.87%	45.87%	53.58%	52.11%	61.74%	54.83%	56.07%	49.24%	49.46%	44.36%	NA
Aug 24, 2018	42.43%	44.70%	45.77%	49.55%	59.30%	54.83%	52.74%	48.59%	51.35%	47.74%	66.54%
Aug 31, 2018	42.91%	44.06%	45.58%	47.81%	56.97%	54.06%	51.79%	49.77%	51.77%	49.45%	64.71%
Sep 7, 2018	42.51%	43.14%	44.82%	46.08%	54.98%	52.08%	49.76%	48.67%	50.01%	48.58%	61.08%
Sep 14, 2018	43.03%	43.39%	41.50%	45.39%	53.88%	51.55%	49.63%	48.96%	50.09%	49.24%	59.88%
Sep 21, 2018	43.40%	43.70%	41.08%	44.25%	52.88%	50.86%	49.21%	48.93%	49.91%	49.18%	58.99%
Sep 28, 2018	NA	NA	NA	NA	52.11%	50.29%	48.55%	48.60%	49.70%	49.33%	58.46%
Oct 19, 2018	45.90%	45.79%	40.09%	43.44%	51.40%	49.49%	48.18%	48.41%	49.46%	49.56%	57.54%
Nov 16, 2018	49.45%	49.22%	41.33%	44.12%	51.55%	50.29%	49.14%	49.51%	50.06%	50.28%	59.05%
Dec 21, 2018	48.88%	49.10%	37.96%	41.82%	49.42%	47.66%	46.99%	47.49%	47.90%	48.16%	56.68%
Jan 18, 2019	48.82%	48.97%	36.75%	40.92%	48.36%	46.69%	45.94%	46.41%	46.85%	47.00%	55.39%
Feb 15, 2019	49.90%	49.97%	38.03%	40.48%	47.77%	46.50%	45.44%	45.77%	46.19%	46.60%	54.62%
Mar 15, 2019	50.16%	50.14%	36.80%	39.96%	47.17%	45.65%	44.99%	45.17%	45.50%	45.94%	53.92%
Jun 21, 2019	50.58%	50.36%	35.71%	38.72%	44.95%	43.88%	42.63%	42.77%	43.52%	43.76%	51.65%
Aug 16, 2019	50.96%	50.63%	34.78%	38.46%	44.73%	43.04%	41.65%	41.90%	42.74%	42.95%	50.88%
Jan 17, 2020	50.91%	50.52%	32.57%	37.08%	42.02%	40.43%	38.54%	38.37%	39.96%	40.87%	48.65%

Table 6

#### 6.2 The BSM Model Provides an Impact Quantum

170. To calculate the impact of any Tesla stock price inflation and implied volatility deflation as a result of the alleged fraud, two options curves are fitted using the BSM Model:

- a. A "re-valued" curve based on observed stock prices and implied volatilities (*i.e.*, the "Actual BSM Option Curve" defined above); and
- b. A "but-for" curve based on counterfactual stock prices and counterfactual implied volatilities (*i.e.*, the "But-for BSM Option Curve" defined above).

171. With the Actual BSM Option Curve and But-for BSM Option Curve created, I calculate the impact of fluctuations in underlying stock price and implied volatility on option prices in two steps. First, I calculate the vega impact (or loss arising from the fall in implied volatility) as the shift from the Actual BSM Option Curve to the But-for BSM Option Curve. Second, I calculate

<sup>103</sup> Minute-by-minute BSM implied volatility can be calculated based on the CBOE DataShop Data using the same formulas.

the delta impact (or loss arising from the allegedly inflated stock price) as the movement along the But-for BSM Option Curve.

172. This two-step process requires two formulas, one for each curve. These formulas are identical to the BSM formula detailed in Section 4.2, and only differ based on the stock price and implied volatility values used.

#### **6.2.1** Re-Valued Fitted Option Value

173. The re-valued call and put option value ( $Call_{re-valued}$  and  $Put_{re-valued}$  respectively) are given by:

$$\begin{aligned} & Call_{re-valued} = S_{observed}N(d_{1\ observed}) - Ke^{-r(T-t)}N(d_{2\ observed}) \\ & Put_{re-valued} = Ke^{-r(T-t)}N(-d_{2\ observed}) - S_{observed}N(-d_{1\ observed}) \end{aligned}$$

where:

$$d_{1\,observed} = \frac{ln\frac{S_{observed}}{K} + \left(r + \frac{\sigma^2_{observed}}{2}\right)(T-t)}{\sigma_{observed}\sqrt{T-t}}$$

$$d_{2 \ observed} = d_{1 \ observed} - \sigma_{observed} \sqrt{T - t}$$

174. The key variables in the equation above are:  $S_{observed}$ , denoting the actual allegedly inflated stock price and  $\sigma_{observed}$ , denoting the actual allegedly deflated implied volatility. For my calculations, I take  $\sigma_{observed}$  based on the observed ATM-forward straddle prices presented in Table 8.

#### **6.2.2** But-for Fitted Option Value

175. The but-for call and put option fitted value ( $Call_{but-for}$  and  $Put_{but-for}$ , respectively) are given by:

$$\begin{aligned} & Call_{but-for} = S_{but-for} N \big( d_{1 \ but-for} \big) - K e^{-r(T-t)} N \big( d_{2 \ but-for} \big) \\ & Put_{but-for} = K e^{-r(T-t)} N \big( -d_{2 \ but-for} \big) - S_{but-for} N \big( -d_{1 \ but-for} \big) \end{aligned}$$

where:

$$d_{1 \ but-for} = \frac{ln \frac{S_{but-for}}{K} + \left(r + \frac{\sigma^2_{but-for}}{2}\right)(T-t)}{\sigma_{butf-for}\sqrt{T-t}}$$

$$d_{2 \ but-for} = d_{1 \ but-for} - \sigma_{but-for}\sqrt{T-t}$$

176. Again, the key variables in the equation above are:  $S_{but-for}$  denoting the counterfactual stock price and  $\sigma_{but-for}$ , denoting the counterfactual implied volatility.

# 6.3 The Black-Scholes Impact Quantum is Reliable, Reasonable and Robust Methodology

177. Figure 22 and Figure 23 in Section 5.5.2 show that on August 7, 2018, the actual option curves based on the mid point of CBOE Datashop bid and ask quotes for the January 18, 2019 and Jan 17, 2020 expiries shifted due to a drop in implied volatility. Figures 22 and 23 shows this is a clear and uniform effect.

178. Zooming in on these figures to see the bid-ask spread shows that variation around the midpoint grew in the afternoon August 7, 2018.

179. Figure 24 shows the bid-ask spread at 12:47 p.m. on August 7, 2018, and compares it with the bid-ask spread at the close of trading that same day. In addition to a drop in implied volatility, the bid-ask spreads expanded following 12:48 p.m. on August 7, 2018.<sup>104</sup>

<sup>&</sup>lt;sup>104</sup> For more details on the construction of Figure 24, *See* Appendix E, Section 11.12.



Figure 24

180. Someone who sold an option at the *top* of the 16:00 blue shaded area managed to achieve, either by luck or guile, a better price than someone who simply by misfortune sold at the *bottom* of the 16:00 blue shaded area. But between 12:47 p.m. and 16:00 p.m., the price of all trades shifted down. There is typically a distribution of prices lying within the bid-ask spreads. I account for this by applying the impact quantum methodology detailed in Section 6.2.

181. Given the existence of bid-ask spreads, a reasonable way to measure the difference between an actual option trade and a counterfactual option trade is to place both on equal footing, *i.e.*, an apples-to-apples comparison. I achieve this through an impact quantum. An impact quantum measures the magnitude of the shift without being affected by the bid-ask spread. If I measured impact as the difference between a unique but-for price and an actual transaction price, then the impact would vary based on where the actual transaction fell within the bid-ask spread. An impact quantum, however, is not affected by the bid-ask spread as it fits both actual and counterfactual transactions to the BSM curve.

182. Therefore, it is important to account for *both* the fact that each extension to the BSM model predicts a different price level *and* the fact that trades are exercised within a bid-ask spread.

Case 3:18-cv-04865-EMC Document 485 Filed 09/20/22 Page 599 of 638

Applying a simple but-for option price would ignore these level effects, and erroneously show

larger losses for people who paid closer to the bid price, and lower losses for someone who

transacted closer to the ask price.

183. To account for this, the actual option transactions are used to fit a re-valued actual option

curve, i.e., the "Re-Valued Fitted Option Value." Specifically, the observed strike price, stock price,

risk-free return, time to maturity, and implied volatility are used to calculate an option's value

according to the BSM model. The but-for option curve is then fitted by substituting in the

counterfactual implied volatility and stock price, i.e., the "But-for Fitted Option Value." The

difference between the re-valued and the counterfactual curves is measured as the price impact.

I declare under penalty of perjury that the foregoing is true and correct.

RESPECTFULLY SUBMITTED THIS EIGHTH DAY OF NOVEMBER 2021

Stoven L. Heston

Steven L. Heston, Ph.D.

#### 7 APPENDIX A

#### Steven L. Heston

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#### 1. Personal Information

#### **Present Employment**

**Professor of Finance**, Smith School of Business, University of Maryland, College Park,

2012-2018

#### **Education**

- 1. Ph.D. in Finance, Carnegie Mellon University, Graduate School of Industrial Administration, 1990
- 2. M.S. in Finance, Carnegie Mellon University, 1987
- 3. M.S. in Industrial Administration ("M.B.A."), Carnegie Mellon University, 1985
- 4. B.S. in Mathematics and Economics, University of Maryland, College Park, 1983

#### **Employment History**

- 1. **Professor of Finance**, Robert H. Smith School of Business, 2012-2018
- 2. Associate Professor of Finance, Robert H. Smith School of Business, 2007-2012
- 3. Assistant Professor of Finance, Robert H. Smith School of Business, 2002-2007
- 4. Goldman Sachs (New York), 1998-2002
  - i. Vice President (U.S. Arbitrage)
  - ii. Vice President (Quantitative Equities)
- 5. **Assistant Professor of Finance**, Washington University in St. Louis, 1994-1998
- 6. Visiting Assistant Professor of Finance, Columbia Business School, 1993-1994
- 7. Assistant Professor of Finance, Yale School of Organization and Management,
- 8. 1989-1993

#### 2. Research & Publications

#### a. Books

- 1. w/ Blair Rodman and Lee Nelson, Kill Phil, Huntington Press, 2005.
- 2. w/ Blair Rodman and Lee Nelson, Kill Elky (French Translation), Huntington Press, 2009.
  - Designed approximate optimal strategies for this book using combinatorial optimization.

- 3. w/ Lee Nelson and Tysen Streib, Kill Everyone, Huntington Press, 2007.
  - Analyzed equilibrium strategies using game theory.

#### **b. Book Chapters**

• Heston, Steven L. and Guofu Zhou, "Exploring the Relation Between Discrete-time Jump Processes and the Finite Difference Method," <u>Advanced Fixed-Income Valuation Tools</u> (edited by N.Jegadeesh and B.Tuckman), 2000.

#### c. Scholarly (Refereed) Articles

- 1. "A Closed-Form Solution for Options with Stochastic Volatility, with Applications to Bond and Currency Options," **Review of Financial Studies** 6, No. 2 (1993) 327- 343 (Reprinted in Stochastic Volatility (Neil Shephard ed.), Oxford University Press, 2005).
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- 3. Heston, Steven L. and K. Geert Rouwenhorst, "Does Industrial Structure Explain the Benefits of International Diversification," <u>Journal of Financial Economics</u> 36 (1994) 3-27 (featured in December 17th 1994 Economist magazine).
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#### e. Research Prizes and Awards

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- 2. Chicago Quantitive Alliance Award (top 3 finalist), 2007
- 3. Top 15% Teaching, R.H. Smith School, 2005-2006
- 4. Best Paper on Derivatives, Montreal Financial Econometrics Conference, 2005

- 5. **Q-Group Funding Award for Option Valuation with a Multifactor Term Structure of Volatility**, 2005
- 6. Risk Magazine Risk Management Hall of Fame, 2002

\*

#### 8 APPENDIX B

#### **Works Considered**

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# 9 APPENDIX C

## **Additional Exhibits**

Expiration	Option Value Traded Within 20% of Moneyness
Aug 10, 2018	99.96%
Aug 17, 2018	99.52%
Aug 24, 2018	98.89%
Aug 31, 2018	96.72%
Sep 07, 2018	95.73%
Sep 14, 2018	96.63%
Sep 21, 2018	91.46%
Sep 28, 2018	97.24%
Oct 19, 2018	85.25%
Nov 16, 2018	78.53%
Dec 21, 2018	78.86%
Jan 18, 2019	75.37%
Feb 15, 2019	77.22%
Mar 15, 2019	80.00%
Jun 21, 2019	63.21%
Aug 16, 2019	77.31%
Jan 17, 2020	64.52%

Table 7

				Standardize	d ATM-Forwa	ard Straddle I	Prices				
Maturity Date	At Close	12:47	At Close	At Close	At Close	At Close	At Close	At Close	At Close	At Close	At Close
	06-Aug	07-Aug	07-Aug	08-Aug	09-Aug	10-Aug	13-Aug	14-Aug	15-Aug	16-Aug	17-Aug
Aug 10, 2018	3.61%	3.97%	4.84%	3.66%	2.92%	NA	NA	NA	NA	NA	NA
Aug 17, 2018	5.80%	6.10%	7.07%	6.53%	7.29%	6.06%	4.68%	3.56%	2.92%	1.85%	NA
Aug 24, 2018	7.52%	7.72%	7.88%	8.27%	9.59%	8.56%	7.30%	6.42%	6.43%	5.64%	7.35%
Aug 31, 2018	8.96%	9.04%	9.32%	9.57%	11.15%	10.34%	9.17%	8.57%	8.64%	7.99%	10.10%
Sep 7, 2018	10.04%	10.05%	10.41%	10.53%	12.35%	11.50%	10.38%	9.95%	10.01%	9.51%	11.68%
Sep 14, 2018	11.21%	11.18%	10.68%	11.52%	13.49%	12.72%	11.72%	11.37%	11.45%	11.06%	13.22%
Sep 21, 2018	12.28%	12.25%	11.50%	12.25%	14.46%	13.75%	12.82%	12.58%	12.66%	12.31%	14.55%
Sep 28, 2018	NA	NA	NA	NA	15.37%	14.68%	13.74%	13.60%	13.75%	13.49%	15.80%
Oct 19, 2018	16.46%	16.33%	14.28%	15.37%	18.05%	17.26%	16.44%	16.39%	16.62%	16.53%	19.03%
Nov 16, 2018	20.80%	20.61%	17.31%	18.39%	21.36%	20.73%	19.95%	19.99%	20.11%	20.09%	23.44%
Dec 21, 2018	23.80%	23.84%	18.45%	20.24%	23.80%	22.88%	22.30%	22.45%	22.56%	22.59%	26.45%
Jan 18, 2019	26.07%	26.08%	19.61%	21.75%	25.59%	24.64%	24.03%	24.19%	24.34%	24.34%	28.55%
Feb 15, 2019	28.79%	28.77%	21.94%	23.28%	27.36%	26.57%	25.77%	25.88%	26.05%	26.21%	30.58%
Mar 15, 2019	30.95%	30.87%	22.72%	24.60%	28.92%	27.94%	27.35%	27.39%	27.53%	27.73%	32.41%
Jun 21, 2019	37.38%	37.17%	26.47%	28.63%	33.13%	32.30%	31.25%	31.30%	31.79%	31.91%	37.50%
Aug 16, 2019	40.76%	40.46%	27.94%	30.83%	35.72%	34.35%	33.13%	33.27%	33.89%	34.01%	40.11%
Jan 17, 2020	48.15%	47.75%	31.06%	35.25%	39.83%	38.31%	36.45%	36.26%	37.70%	38.50%	45.60%

Table 8

	BSM Implied Volatility										
Maturity Date	At Close	12:47	At Close								
	06-Aug	07-Aug	07-Aug	08-Aug	09-Aug	10-Aug	13-Aug	14-Aug	15-Aug	16-Aug	17-Aug
Aug 10, 2018	43.19%	53.65%	66.99%	61.90%	70.04%	NA	NA	NA	NA	NA	NA
Aug 17, 2018	41.87%	45.87%	53.58%	52.11%	61.74%	54.83%	56.07%	49.24%	49.46%	44.36%	NA
Aug 24, 2018	42.43%	44.70%	45.77%	49.55%	59.30%	54.83%	52.74%	48.59%	51.35%	47.74%	66.54%
Aug 31, 2018	42.91%	44.06%	45.58%	47.81%	56.97%	54.06%	51.79%	49.77%	51.77%	49.45%	64.71%
Sep 7, 2018	42.51%	43.14%	44.82%	46.08%	54.98%	52.08%	49.76%	48.67%	50.01%	48.58%	61.08%
Sep 14, 2018	43.03%	43.39%	41.50%	45.39%	53.88%	51.55%	49.63%	48.96%	50.09%	49.24%	59.88%
Sep 21, 2018	43.40%	43.70%	41.08%	44.25%	52.88%	50.86%	49.21%	48.93%	49.91%	49.18%	58.99%
Sep 28, 2018	NA	NA	NA	NA	52.11%	50.29%	48.55%	48.60%	49.70%	49.33%	58.46%
Oct 19, 2018	45.90%	45.79%	40.09%	43.44%	51.40%	49.49%	48.18%	48.41%	49.46%	49.56%	57.54%
Nov 16, 2018	49.45%	49.22%	41.33%	44.12%	51.55%	50.29%	49.14%	49.51%	50.06%	50.28%	59.05%
Dec 21, 2018	48.88%	49.10%	37.96%	41.82%	49.42%	47.66%	46.99%	47.49%	47.90%	48.16%	56.68%
Jan 18, 2019	48.82%	48.97%	36.75%	40.92%	48.36%	46.69%	45.94%	46.41%	46.85%	47.00%	55.39%
Feb 15, 2019	49.90%	49.97%	38.03%	40.48%	47.77%	46.50%	45.44%	45.77%	46.19%	46.60%	54.62%
Mar 15, 2019	50.16%	50.14%	36.80%	39.96%	47.17%	45.65%	44.99%	45.17%	45.50%	45.94%	53.92%
Jun 21, 2019	50.58%	50.36%	35.71%	38.72%	44.95%	43.88%	42.63%	42.77%	43.52%	43.76%	51.65%
Aug 16, 2019	50.96%	50.63%	34.78%	38.46%	44.73%	43.04%	41.65%	41.90%	42.74%	42.95%	50.88%
Jan 17, 2020	50.91%	50.52%	32.57%	37.08%	42.02%	40.43%	38.54%	38.37%	39.96%	40.87%	48.65%

Table 9

Constant Maturity US Treasury Yield (%)										
Date	1-Month	3-Month	6-Month	1-Year	2-Year					
August 7, 2018	1.96	2.06	2.23	2.45	2.68					
August 8, 2018	1.93	2.06	2.24	2.44	2.68					
August 9, 2018	1.91	2.06	2.25	2.44	2.64					
August 10, 2018	1.92	2.05	2.23	2.42	2.61					
August 13, 2018	1.93	2.06	2.22	2.42	2.61					
August 14, 2018	1.96	2.08	2.25	2.44	2.63					
August 15, 2018	1.96	2.07	2.23	2.45	2.61					
August 16, 2018	1.96	2.07	2.24	2.45	2.63					
August 17, 2018	1.95	2.05	2.24	2.44	2.61					

Table 10

#### 10 APPENDIX D

#### **Data Sources**

#### 10.1 IVolatility Data

- 1. IVolatility Historical Intraday Options Trades Data is available from January 2018 to December 2018 and includes full trade by trade data for options on Tesla common stock. The IVolatility data includes the following data:
  - Options' trade prices with sizes during trading market hours
  - Options' bid and ask quotations at the time of transaction
  - Underlying's bid, ask, and trade prices at the time of option's trade
  - Options' Implied Vols and Greeks

#### 10.2 Bloomberg Data

2. Bloomberg volume data (field: PX\_VOLUME) for Tesla common stock, August 2018 was used.

#### 10.3 CBOE Data

- 3. CBOE DataShop Option Intervals data is available from February 12, 2018 to February 11, 2019 and includes data for options on Tesla common stock obtained for one-minute intervals from the CBOE Exchange, Inc., CBOE DataShop.
  - 4. The raw data was cleaned as follows:
  - Any entry with a symbol different from "TSLA" was discarded
  - Bid and ask prices of 0 were ignored
  - Mid prices were computed as the average of bid and ask
  - Time to maturity was computed as the time to 4pm on the day of the expiry / 365 days
  - The forward price of the underlying price (with maturity equal to the maturity of the option) is computed using a flat interest rate of 2.4% over 365 days, continuously compounded
  - Quotes collected during the trading halt of the underlying were discarded (14:08 to 15:45 on Aug 7, 2018)

# **10.4 Data Source Summary**

Table/Figure	CBOE DataShop	lVolatility	Bloomberg	Fideres
Table 1	-	-	-	based on Hull
Table 2	-	-	-	based on Hull
Table 3	yes	-	yes	-
Table 4	yes	-	-	-
Table 5	yes	-	-	-
Table 6	yes	-	-	-
Table 7	yes	-	-	-
Table 8	yes	-	-	-
Table 9	yes	-	-	-
Table 10	-	-	-	from Federal Reserve Board
Figure 1	-	-	-	based on Hull
Figure 2	-	-	-	based on Hull
Figure 3	-	-	-	based on Hull
Figure 4	-	-	-	based on Hull
Figure 5	-	-	-	based on Hull
Figure 6	-	-	-	from Federal Reserve Board
Figure 7	-	-	-	based on Hull
Figure 8	-	-	-	based on Hull
Figure 9	-	-	-	based on Hull
Figure 10	yes	-	-	-
Figure 11	yes	-	-	-
Figure 12	yes	-	-	-
Figure 13	yes	-	-	-
Figure 14	yes	-	-	-
Figure 15	yes	-	-	-
Figure 16	yes	-	-	-
Figure 17	yes	-	-	-
Figure 18	yes	-	-	-
Figure 19	yes	-	-	-
Figure 20	yes	-	-	-
Figure 21	yes	-	-	-
Figure 22	yes	yes	-	-
Figure 23	yes	yes	-	-
Figure 24	yes	-	-	-

#### 11 APPENDIX E

#### **Further Explanations**

#### 11.1 Standardized ATM-Forward Straddle Price

1. Given an expiration date  $m_0$ , an ATM-forward straddle  $\theta_{m0}$  is a portfolio of the two straddles with the strike prices  $K_0$ ,  $K_1$  closest to the forward price F as of the given expiration date such that  $K_0 < F < K1$ . These two straddles are weighted such that more weight is given to the straddle whose strike price is closer to the computed forward price F, and divided by the contemporaneous active underlying stock price.

$$F = S_0 e^{rt}$$

$$w_{K0} = \frac{(K_1 - F)}{K_1 - K_0}$$

$$w_{K1} = 1 - w_{K0}$$

$$\theta_{m0} = \frac{w_{K0} * (c_{K0} + p_{K0}) + w_{K1} * (c_{K1} + p_{K1})}{S_0}$$

2. The forward price F is computed using the formula above, where r is the continuously compounded interest rate (2.4% over 365 days), t is the time to maturity of the option expressed as a fraction of 365 days  $t = \frac{days\ to\ maturity}{365}$ , and  $S_0$  is the current active underlying price at the time of the creation of the straddle. Lastly, c and p represent respectively the mid-prices of a put and of a call option on Tesla shares, with maturity indicated in the subscript. The mid-prices are computed as the average of the bid and ask spread for that option.

#### 11.2 Constant Maturity ATM-Forward Straddle Price

3. Given a desired time to maturity  $t_{mx}$ , a constant maturity straddle portfolio  $\theta_{mx}$  is a portfolio of the two standardized ATM-forward straddle portfolios (see above)  $\theta_{m0}$  and  $\theta_{m1}$  such that  $t_{m0} < t_{mx} < t_{m1}$  with time to maturity closest to  $t_{mx} = \frac{days \ to \ maturity}{365}$ . The two straddle portfolios are weighted accordingly to their distance from the desired time to maturity, with the straddle closest to the desired maturity being given a larger weight.

$$\begin{split} w_{m0} &= \frac{t_{m1} - t_{mx}}{t_{m1} - t_{m0}} \\ w_{m1} &= 1 - w_{m0} \\ \theta_x &= \frac{\sqrt{t_{mx}}}{\sqrt{t_0}} w_{m0} \theta_{m0} + \frac{\sqrt{t_{mx}}}{\sqrt{t_1}} w_{m1} \theta_{m1} \end{split}$$

4. The value of an ATM-forward straddle is increasing with expiration and roughly proportional to the squared root of maturity. Although we do not assume any model, both the BSM model and the data show that ATM-forward straddle price scaled by the square-root of maturity is almost constant. Therefore, a portfolio of longer and shorter options can be rebalanced to maintain a constant weighted-average maturity. While we cannot interpret the changes in this price as returns, we can interpret the changes as fluctuations in market prices of similar options over time.

#### 11.3 Constant Maturity Straddle

- 5. The constant maturity line in Figure 15 is constructed from the CBOE DataShop minuteby-minute quote data and portray the change in the price of a constant maturity straddle portfolio over the course of the Class Period.
- 6. The straddles are constructed on a five-minute basis by taking the last available quotes in each five-minute window and plotting each resulting standardized straddle. Each line represents a series of constant maturity straddles with different time to maturity, as illustrated in the legend.

#### 11.4 Raw Maturity Straddle

- 7. The raw maturity lines in Figure 14 and Figure 17 are constructed from the CBOE DataShop minute-by-minute quote data and portray the change in the price of a fixed maturity date straddle portfolio over the course of the Class Period.
- 8. Figure 14 is constructed on a five-minute basis by taking the last available quotes in each five-minute window and plotting the price of each resulting standardized straddle. Each line represents a series of constant maturity straddles with different expirations, as illustrated in the legend.
- 9. Figure 17 is constructed on a minute-by-minute basis on raw data, and shows data only for August 6 and 7, 2018.

#### 11.5 Scatter Plot

- 10. The straddle figure (Figure 16) is constructed from the CBOE DataShop minute-by-minute quote data and portray the relationship between changes in the prices of long- and short-term straddles (vertical and horizontal axis, respectively). For the purpose of this figure, I discarded all quote data following the end of the Class Period, and only used the last quote of the trading day.
- 11. The constant maturity straddles are first computed as per Section 11.2, for the times to maturity indicated in the axis, for each day of the data selected. Then on each day, the percentage change is computed against the previous day each point on the chart has coordinates corresponding to the percentage change in price on long- and short-term straddles.
- 12. A simple linear regression is then run, regressing the long-term straddle changes against the short-term straddle changes, excluding the colored points in the chart (*i.e.*, August 7, 8, 9, and 17). The shaded area represents the regression line  $\pm$  5 times the sample standard deviation of the residuals of the regression.

#### 11.6 Trading Volume by Moneyness

- 13. These histograms (Figure 12 and Figure 13) are constructed from the IVolatility Data. Each bar chart shows the option value traded from 12:48 p.m. on August 7 to the close of trading on August 17, 2018 for a given option expiry. The option value is shown as a function of moneyness, such that each bar represents the total option value traded for that bucket of moneyness (strike price / stock price). For each chart, 50 equally sized moneyness buckets were created, covering the whole range of observed moneyness for that option in that time period.
- 14. Option value is here computed as the difference between the total option premium and the intrinsic value of that option. As an example, for any trade on a put option the option value OV will be the put premium p, less the maximum of 0 and the difference between the present value of the strike K, and the active underlying stock price  $S_o$ . As with other calculations, t is the time to maturity for that option, and r is the interest rate.
- 15. Consequently, each bar height will be computed as the sum of the *OV* traded across all the set *X* of options traded in period specified above, with the stated maturity and moneyness. Please note that the premiums stated in the dataset refer to the price of an option on a single TSLA share,

while the option underlying is 100 contracts – the bar height has been adjusted accordingly.

$$OV = \begin{cases} if \ put & p - max\left(0, \ \frac{K}{e^{rt}} - S_0\right) \\ if call & c - max\left(0, \ S_0 - \frac{K}{e^{rt}}\right) \end{cases}$$

$$bar \ height = \sum_{i \in X} 100 \ OV_i$$

#### 11.7 Spread Change Plots

16. The figures (Figure 22 and Figure 23) are constructed using both the CBOE DataShop data and IVolatility data, subset to quotes and trades from August 7. Each plot shows bid-ask spreads and trades occurring before and after 12:48 p.m. In particular, the blue dots represent trades which occurred in the five minutes before the tweet (12:43 p.m. to 12:47 p.m.), while the red dots represent trades which occurred in the last five minutes of the trading day (15:56 to 16:00). Similarly, the orange ribbons represent the bid-ask spread before 12:48 p.m., while the blue ribbons represent the bid-ask spread at the end of the trading day (16:00). Each trade and quote price is standardized by the contemporaneous active stock price. Similarly on the horizontal axis, the strike price is divided by the contemporaneous active underlying stock price, from the same dataset.

- 17. For each of the two points in time, the chart shows two ribbon-curves, representing spreads on calls and puts respectively. Each ribbon is composed of two lines, representing the bid and ask premium, across different strikes the colored area between the two lines represents the bid-ask spread.
- 18. I present the bid-ask spread in the CBOE DataShop minute-by-minute data because the individual bid-ask spread associated with each transaction does not necessarily reflect market liquidity when the underlying price is changing quickly. The widening of bid-ask spread for many individual trades were likely a result of market makers protecting themselves from losing money on their hedges because of the rapid change in underlying prices. <sup>105</sup> In fact, August 7, 2018 had large trading volume, indicating a liquid market, as shown in Table 3.

<sup>105</sup> See https://tickertape.tdameritrade.com/trading/large-bid-ask-spreads-volatile-markets-15241 (accessed November 8, 2021).

#### 11.8 Regression

- 19. The t-statistics shown in footnote 89 were based on regression analysis that relies on CBOE DataShop data, and captures the relationship between changes in the prices of long- and short-term constant maturity straddles (dependent and independent variables, respectively).
- 20. For the purpose of this analysis, we have only used data from the last quote of each day, throughout the whole dataset.
- 21. The constant maturity straddles are first computed as per Section 11.2, for each day, separately for a fixed time to maturity. Then, on each day, the percentage change in straddle price is computed against the previous day. The resulting two variables are then entered in a regression in which the changes in long-term straddle price are modelled as the dependent variable. The independent variables are respectively the short-term straddle prices, and four dummy variables representing respectively August 7, 8, 9, and 17, as well as an intercept.
- 22. The t-values of each coefficient are computed as the coefficient itself, divided by its standard error.

#### 11.9 Option Bid-Ask Spread Curves

- 23. Figure 10 and Figure 11 represent the bid-ask spreads, on the last minute of the trading day, across different strikes and/or underlying stock price, on options with exactly 30 days to maturity. These figures are created using the CBOE DataShop data.
- 24. For each day, Figure 10 show two ribbon-curves, representing spreads on calls and puts respectively. Each ribbon is composed of two lines, representing respectively the current bid and ask premium, across different strikes the colored area between the two lines represents the bid-ask spread.
- 25. Figure 11 is identical to Figure 10 except for the scaling in this chart, bids and asks are expressed as bid price/stock price and ask price/stock price, where the "stock price" is the contemporaneous active underlying stock price, as per the CBOE DataShop data.

#### 11.10 Mid Prices on Consecutive Days

26. Figure 18 represents the mid prices of Tesla call options on two pairs of consecutive days – the first two trading days of March and June, respectively. The chart was constructed using the 4 p.m. quotes from the CBOE DataShop data on the relevant dates. Mid prices are computed as the average of bid-ask spreads

#### 11.11 Mid-Price Drop

- 27. Figure 19 and Figure 21 represent the mid-prices of Tesla call options on August 7, before and after 12:48, across different strikes. The charts are constructed using CBOE DataShop quote data, and the mid-price is computed as the average of the bid and ask prices.
- 28. In Figure 21, both the mid-prices and strikes are standardized by the contemporaneous active underlying price, as per the same dataset. In this figure, the two red and yellow points represent the same option on two different days -i.e., call options with a strike of \$450 and \$340, respectively.

#### 11.12 Spread Widening on August 7

- 29. Figure 24 represents the option prices of Tesla call options at and after 12:47 p.m. on August 7, across different strikes. The chart shows two ribbon-curves, representing spreads on calls at different points in time, as well as a line within them, representing the mid-price (computed as the average of the bid and ask). Each ribbon is composed of two lines, representing the bid and ask premium, across different strikes the colored area between the two lines represents the bid-ask spread. The red points are placed at the mid-price for a \$450 call option, at the two different points in time
  - 30. These charts are created using the CBOE DataShop data.

#### 11.13 Black Scholes Charts

31. This figure (Figure 20) displays two theoretical option curves computed using the standard BSM formula presented in Section 4.2, representing the BSM prices implied by the ATM-forward straddles at the end of August 6 and 7. The following inputs were used:

Variable	August 7, 2018		
	12:47		COB
Stock Price	\$ 356.94	\$	379.58
Straddle Price	47.75%		31.06%
Implied Volatiity	50.52%		32.57%
Time to Maturity	1.4469*		1.4466*
Interest Rate	2.4%		2.4%

<sup>\*</sup>Time to Maturity measured in years

#### 11.14 Overnight Returns

- 32. Table 4 shows the change in value over the Class Period of two straddles expiring March 15, 2019 and Jan 17, 2020, had they been purchased by an investor at 12:47 p.m. on August 7, 2018. Unlike most of my analysis, these are ATM-spot, not ATM-forward straddles.
- 33. The straddle returns represent the percentage decline in the *same* straddle. For example, suppose that a \$360 straddle drops from \$120 to \$100 when the stock price rises from \$360 to \$400, and the new \$400 straddle costs \$120. Although the ATM straddle/stock changes from 33.3% to 30%, the old \$360 straddle lost 16.67% of its value. Therefore, the return is -16.67%.
- 34. The strikes of the straddles were selected to be the closest strikes to ATM-spot and are taken from CBOE DataShop data.

### UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF CALIFORNIA

IN RE TESLA, INC. SECURITIES LITIGATION	Case No. 3:18-cv-04865-EMC
	Hon. Edward M. Chen

 ${\bf SUPPLEMENTAL\ EXPERT\ REPORT\ OF\ STEVEN\ L.\ HESTON, Ph.D.}$ 

March 5, 2022

**Exhibit** 

369

Heston 3/16/2022 J.W.

### **Table of Contents**

1	Ass	ignment and Materials Considered	1
2	Key	Responses and Conclusion	1
3	Prof	fessor Seru's Contention that the BSM Model is an Unreliable Model for Estimating	
Ir	npact Q	Quantum is Incorrect and Baseless	3
	3.1	The Seru Report Mischaracterizes the Academic Literature it Relies Upon	3
	3.2	Professor Seru's Attacks on the Underlying Assumptions of the BSM Model are	
	Unsub	stantiated and Mere Theoretical Generalizations	5
4	The 4.1	Heston Report Impact Quantum is a Reliable, Reasonable and Robust Methodology Option Models Predict Similar Price Responses to Implied Volatility Changes,	6
		dless of the Assumed Shape of the Implied Volatility Curve	6
	4.2	Models using Constant Implied Volatility Perform Better than Models with Variable	
	Implie	ed Volatility for Measuring Impact Quantum	8
	4.3	Professor Seru Mistakes Model Misspecification with Price Variation within the Bid-	
	Ask O	uotes1	0

#### 1 ASSIGNMENT AND MATERIALS CONSIDERED

- 1. In this report, I respond to the criticisms presented in the Expert Rebuttal Report of Professor Amit Seru ("Professor Seru") dated December 8, 2021 ("Seru Report"). I have been asked by Court-appointed Lead Counsel and Class Counsel Levi & Korsinsky, LLP, to review and evaluate the Seru Report, including the calculations, empirical analyses, assumptions, and opinions contained therein. I have prepared this report to be viewed in conjunction with the Expert Report of Steven L. Heston, Ph.D. dated November 8, 2021 ("Heston Report") that I previously submitted in this action.
- 2. I have relied on the materials listed in the appendices of the Seru Report, the Heston Report, and referenced herein. The research and analysis upon which my opinions are based has been conducted by me with the support of Fideres Partners LLP whose staff has been working under my direction and supervision. My compensation does not depend in any way on my opinions or the outcome in this matter or any other. My conclusions are based on information available to me as of the date of this report. I may review, evaluate, and analyze relevant material that becomes available to me in the future. I reserve the right to amend, supplement, or otherwise modify my findings and conclusions as appropriate.

#### 2 KEY RESPONSES AND CONCLUSION

- 3. Professor Seru has not argued against my opinions summarized in paragraphs 11-14 of the Heston Report, specifically:
  - "At-the-money-forward Tesla option prices, including straddles, provide a reasonable and reliable measurement of option prices relative to underlying stock prices";
  - "Following 12:48 p.m. on August 7, 2018, Tesla stock prices rose, and long-term [...] option [...] prices fell sharply";
  - "All long-term Tesla put options lost value on August 7, 2018"; and
  - "Prices of long-term out-of-the money Tesla call options fell, while prices of long-term inthe-money Tesla call options rose on August 7, 2018."
- 4. Nor has Professor Seru argued against the capacity of the Black-Scholes-Merton (BSM) model to qualitatively describe these phenomena in terms of underlying stock price and volatility.

5. The absence of these arguments tacitly acknowledges the regularity of option prices as functions of underlying stock and volatility. This concedes the feasibility of financial engineering to measure reasonable, reliable, and robust counterfactual option prices that may be used to calculate damages.

6. Instead, Professor Seru raises conceptual and practical arguments against my application of the BSM model in this case. Particularly, Professor Seru contends that the BSM model is unreliable and inappropriate when a company is involved in a merger or acquisition deal, that the assumptions of the BSM model are inaccurate, and that I fail to account for the volatility curve.

7. As explained herein, Professor Seru's conceptual arguments are unfounded (even by the literature he cites in support thereof). Notably, the Seru Report failed to address my citations to highly regarded, widely cited academic literature.

8. Moreover, Professor Seru's exposition of practical calculations using historical option midprices exaggerates the differences between modeled option value changes and movements in mid prices. By ignoring the effects of bid-ask spreads in his calculations, Professor Seru presents a misleading characterization of precision. In contrast, my methodology addresses the noise in bid and ask quotations by fitting smooth option curves to both actual option prices and to counterfactual option values, and then calculating the difference between them.

9. The BSM formula is a smooth function of stock price, strike price, and volatility. This formula reasonably resembles observed historical Tesla option prices, including during the Class Period. As explained in the Heston Report, using ATM-forward options is a well-accepted way to *reasonably* and *reliably* calculate implied volatility over time. By averaging liquid prices for puts and calls, this method is robust to small amounts of noise in prices.

10. In summary, I find Professor Seru's criticisms either incorrect, unsubstantiated, or irrelevant.

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<sup>&</sup>lt;sup>1</sup> Heston Report, ¶72.

# 3 PROFESSOR SERU'S CONTENTION THAT THE BSM MODEL IS AN UNRELIABLE MODEL FOR ESTIMATING IMPACT QUANTUM IS INCORRECT AND BASELESS

11. The Seru Report criticism of my use of the BSM model following buyout or merger announcements as inappropriate is based on a misleading and selective review of three papers.<sup>2</sup> Contrary to Professor Seru's assertions, these papers actually use the BSM model to measure changes in option values, including during a merger or acquisition deal event. Moreover, the Seru Report made no attempt to empirically validate these criticisms, whereas the Heston Report showed that multiple graphs of actual Tesla option prices are smooth functions of the stock price, strike price, and volatility, as predicted by the BSM model.

#### 3.1 The Seru Report Mischaracterizes the Academic Literature it Relies Upon

- 12. Black-Scholes (1973) is a Nobel Prize winning paper widely cited and used by academics as well as practitioners. It has over 40,000 citations according to Google Scholar<sup>3</sup> and is in fact used by Tesla itself to value stock options granted to employees.<sup>4</sup> As Rubinstein states, the Black-Scholes option pricing model is the most widely used formula, with embedded probabilities, in human history.<sup>5</sup> By contrast, Professor Seru cited three papers to support his assertion that the BSM model "is neither reliable nor appropriate when a company is involved in a merger or acquisition deal." Most importantly, Professor Seru failed to fully engage with his citations and consequently misstated their conclusions regarding the efficacy of the BSM model.
- 13. These citations do not support Professor Seru's contention that the BSM formula is unreliable or inappropriate. To the contrary, each paper employs the BSM model and/or builds

<sup>&</sup>lt;sup>2</sup> See Seru Report, ¶¶12-15.

<sup>&</sup>lt;sup>3</sup>Google Scholar, *The Pricing of Options and Corporate Liabilities*, https://scholar.google.com/scholar?hl=en&as\_sdt=0%2C33&q=The+Pricing+of+Options+and+Corporate+Liabilities&btnG= (last visited Mar.3, 2022).

<sup>&</sup>lt;sup>4</sup> See Form 10-K, Tesla, Inc., filed Feb 19, 2019, p. 122, https://www.sec.gov/Archives/edgar/data/1318605/000156459019003165/tsla-10k\_20181231.htm; Form 10-K, Tesla, Inc. filed Feb 4, 2022, p. 82,

https://www.sec.gov/ix?doc=/Archives/edgar/data/1318605/000095017022000796/tsla-20211231.htm.

<sup>&</sup>lt;sup>5</sup> See Heston Report, ¶113 citation of Rubinstein, Mark, "Implied Binomial Trees", The Journal of Finance 49.3 (1994): 771-818. Print.

<sup>&</sup>lt;sup>6</sup> Seru Report, ¶14; see also id. at ¶¶8, 12, 13-15.

upon it as a tool for evaluating option values in the context of a merger and acquisition. Moreover, none of Professor Seru's three citations discuss measuring changes in option prices under a counterfactual scenario.

- 14. Barone-Adesi et al. (1994) relied *exclusively* on the BSM model to evaluate a deal's probability of success. Subramanian (2004) stated that "Our primary objective is to provide the simplest possible extension of the Black–Scholes model [...]," and Bester et al (2021) claimed that "The model is perhaps the simplest extension of the Black and Scholes (1973)."
- 15. Contrary to Professor Seru's depiction, each paper found that option prices reacted to merger and acquisition announcements as the BSM model and Heston Report predict. Barone-Adesi et al. (1994) concluded "we have provided considerable evidence to suggest that investors do indeed price the options targeted for a takeover [...] by setting their prices so as to reduce the implied stock volatility." This is precisely what is depicted for maturities of 90 days or longer in Figure 15 of the Heston Report. Bester et al. (2021) say "Our success probability measure has significant predictive power for the merger outcome". Therefore, Professor Seru's reliance on these papers is misplaced as they do not state that the BSM model is unreliable for the purpose of measuring changes in option prices.
- 16. Professor Seru also quotes Bester et al. (2021) to argue "[a] simple but stark implication of the model is that the implied volatility curve for the target of a cash merger must exhibit a kink [...]." Professor Seru omitted that Bester et al. (2021) illustrated this kink *only* for the AT&T deal. Moreover, the Seru Report made no attempt to evaluate if there was a comparable kink in the Tesla option data. Professor Seru's critique is therefore purely hypothetical and unsubstantiated.
- 17. Moreover, the AT&T deal implicitly cited by Professor Seru had the largest buyout premium of any stock in Bester et al. (2021)'s sample. The AT&T deal differs from the Tesla buyout announcement because AT&T's buyout offer had a larger premium over the prevailing stock price of 75%, as compared to just 18% for Tesla. Therefore, Bester et al. (2021)'s particular

<sup>&</sup>lt;sup>7</sup> Heston Report, ¶133.

<sup>&</sup>lt;sup>8</sup> Seru Report, ¶13.

<sup>&</sup>lt;sup>9</sup> Tesla's price was \$356.94 at 12:47 p.m. before Elon Musk's tweet.

finding of a kink in the implied volatility curve is distinguishable and does not invalidate the use of the BSM model here.

18. In summary, the literature cited by Professor Seru utilizes the BSM model to measure how option prices react to merger and acquisitions scenarios, and found that, consistent with both the Heston and Expert Damages Report of Michael L. Hartzmark dated November 10, 2021 ("Hartzmark Report"), long-term implied volatility fell and stock prices rose following a buyout announcement<sup>10</sup>. Importantly, the conclusions of all three papers were predicated on the BSM model. The Seru Report's characterization of these papers therefore exhibits only a cursory engagement that omits their key findings and ignores their methodologies.

### 3.2 Professor Seru's Attacks on the Underlying Assumptions of the BSM Model are Unsubstantiated and Mere Theoretical Generalizations

- 19. Figures 1 and 2 in the Seru Report<sup>11</sup> are hypothetical and exaggerated illustrations that are neither based on any Tesla stock and options data nor any empirical analyses. As such, these figures are purely expository as they present *hypothetical* scenarios where Seru contends that the BSM model may be inaccurate.
- 20. Professor Seru further alleges that "Professor Heston's assumption of put-call parity is not supported by the academic literature and does not hold for Tesla stock during the Class Period." For this purpose, I refer him to Dr. Michael Hartzmark's report submitted on September 22, 2022 concerning his analysis regarding put-call parity for Tesla options. Notwithstanding, the impact quantum methodology presented in the Heston Report neither assumes nor requires put-call parity to reliably and reasonably calculate counterfactual option prices.
- 21. Regardless of the merits of put-call parity, Professor Seru's criticism is irrelevant because it confuses a *sufficient* condition with a *necessary* condition. Regardless of the condition, my methodology does not require put-call parity. I discussed put-call parity in the context of the BSM

<sup>&</sup>lt;sup>10</sup> See Hartzmark Report, Sections V.B.3 and VI.C.3

<sup>&</sup>lt;sup>11</sup> *See* Seru Report, ¶¶12, 22.

<sup>&</sup>lt;sup>12</sup> *See* Seru Report, ¶¶16-21.

<sup>&</sup>lt;sup>13</sup> See Expert Report of Michael L. Hartzmark, Ph.D. dated September 22, 2020, ¶125-133.

model,<sup>14</sup> because it implies that ATM-forward put values equal ATM-forward call values. As I explained in paragraph 1 of Appendix E in the Heston Report, my methodology uses ATM-forward straddles, which are the sum of ATM-forward put option and ATM-forward call option prices. This methodology does not require these put and call prices to be equal because this methodology merely uses the sum (or equivalently the average) of option prices. Moreover, this procedure of using straddles offers the advantage of averaging out noise in the put and call prices stemming from bid-ask spreads, stale quotations, or other microstructural data effects.

## 4 THE HESTON REPORT IMPACT QUANTUM IS A RELIABLE, REASONABLE AND ROBUST METHODOLOGY

22. Professor Seru criticizes my impact quantum methodology by asserting that it misprices Tesla options, particularly for deep-in-the-money or deep-out-of-the-money options, by not accounting for any volatility curves. He further contends that because the methodology inaccurately captures the *level* of prices, it cannot accurately measure the *change* in prices. Here, Professor Seru's criticisms ignore substantial portions of the academic literature cited in the Heston Report. Furthermore, his critique confounds model misspecification with price fluctuation within the bid-ask spread. Professor Seru's arguments do not undermine the reliability, reasonableness, and robustness of my methodology for calculating counterfactual option prices

### **4.1** Option Models Predict Similar Price Responses to Implied Volatility Changes, Regardless of the Assumed Shape of the Implied Volatility Curve

23. My experience with stochastic volatility models<sup>15</sup> and jump models<sup>16</sup> shows that there are multiple, complementary ways to develop complicated and flexible option models to improve their fit to the *level* of option prices. But no other option model is as documented and widely accepted as the BSM model. In general, the deviations of models from the BSM predictions are quite persistent over time. This means distinct models show similar shifts in option prices following a change in stock price or implied volatility (even if they predict different price levels), and that

<sup>&</sup>lt;sup>14</sup> *See* Heston Report, ¶¶107,128.

<sup>&</sup>lt;sup>15</sup> See Heston, Steven L., "A closed-form solution for options with stochastic volatility with applications to bond and currency options", *The Review of Financial Studies* 6.2 (1993): 327-343. See also Heston, Steven L., and Saikat Nandi., "A closed-form GARCH option valuation model", *The Review of Financial Studies* 13.3, (2000): 585-625.

<sup>&</sup>lt;sup>16</sup> See Heston, Steven L., "Invisible parameters in option prices", The Journal of Finance 48.3 (1993): 933-947.

these predictions of *change* in option values resemble those of the BSM model.

- 24. Hence, different models can be used as complementary tools that will result in similar predictions. Importantly, options models uniformly predict that a stock price increase will positively affect the values of call options, and negatively affect the values of put options. Furthermore, option models predict that an increase in implied volatility positively affects the values of both call and put options. To facilitate interpretation of their economic results, different models might be formulated or expressed in terms of probabilities, or volatility, or variance. Therefore, although a different model may be a useful tool in evaluating a specific dataset, that does not mean that other similar models are speculative, unreliable or inaccurate. Rather they are simply complementary tools that may be usefully applied to address different questions.<sup>17</sup>
- 25. When option models generate different predictions, the BSM model can outperform more complex models. By definition, the BSM formula assumes constant implied volatility. Dumas, Fleming and Whaley (1998) illustrate overparametrized models that perfectly fit the option curve actually perform worse than the original BSM model when predicting out-of-sample option prices. In other words, relevant academic literature has empirically documented that models the fit the implied-volatility can be less accurate than the BSM model in predicting price changes. Professor Seru's report does not acknowledge, let alone engage with, the relevant literature on this subject, even though it is cited in the Heston Report.
- 26. In contrast, Professor Seru concludes that "Professor Heston's assumption of constant implied volatility across options is speculative, unreliable, inaccurate, and not supported by the academic literature." In conjunction with this assertion, the Seru Report presents an alternative implementation of the BSM formula that uses a different implied volatility for every option series. <sup>19</sup> Professor Seru fails to cite supporting literature for his proposed alternative methodology.
  - 27. The general idea of modelling option values by fitting an implied volatility curve is

<sup>&</sup>lt;sup>17</sup> "[...] all models are approximations. Essentially, all models are wrong, but some are useful. However, the approximate nature of the model must always be borne in mind [...]" *See* Box, George EP, and Norman R. Draper. Empirical model-building and response surfaces. John Wiley & Sons, 1987 p. 424.

<sup>&</sup>lt;sup>18</sup> See Seru Report, ¶8.

<sup>&</sup>lt;sup>19</sup> *See* Seru Report, ¶¶24-26.

plausible and well established.<sup>20</sup> But Professor Seru's proposed methodology is novel, and he does not reference any literature. Instead, Professor Seru ignores my citation to Dumas, Fleming, Whaley (1998) that shows the BSM model predicts option price changes better than models which exactly fit implied volatilities.

28. Different approaches using different assumptions and different data can produce similar, but somewhat different and reasonable estimates of changes in option values. It is my opinion that the impact quantum presented in the Heston Report performs better as it follows the Dumas, Fleming, Whaley (1998) evidence that simple models predict out-of-sample price changes better than complex, over-fitted models. Additionally, my methodology uses ATM-forward options which have greater liquidity and smaller percentage bid-ask spreads than Professor Seru's far-from-the-money options.

### **4.2** Models using Constant Implied Volatility Perform Better than Models with Variable Implied Volatility for Measuring Impact Quantum

29. Professor Seru repeatedly confuses the objective of fitting option price *levels* at one time with fitting *changes* through time. These are importantly different objectives. In particular, the measurement of impact quantum is the difference between option values under one set of assumptions, and option values under an alternative but-for scenario. It is essentially the change in option values under two different scenarios.

30. Professor Seru asserts "There is **no reason** to think that a model which is biased in levels would accurately capture price differences, and Professor Heston provides **no evidence** that the Black-Scholes model is accurate in changes or differences." In stating this, Professor Seru entirely failed to engage with my citation to Dumas, Fleming, and Whaley (1998), who implemented Rubinstein (1994)'s model, and showed that the Implied Binomial Tree underperforms the BSM model in predicting option price *changes*. In other words, the BSM model has been documented to accurately capture option price *changes* compared to a complex benchmark model that perfectly describes option prices.

<sup>&</sup>lt;sup>20</sup> See Hull, John C. Option, Futures and Other Derivatives. Pearson Education, 2015, Chapter 20.

<sup>&</sup>lt;sup>21</sup> See Seru Report, ¶30 (emphasis added).

- 31. Dumas, Fleming, and Whaley (1998) wrote: "Claims that the Black and Scholes (1973) valuation formula no longer holds in financial markets are appearing with increasing frequency [...] the DVF model's prediction errors grow larger as the volatility function specification becomes less parsimonious." And "Across the overall sample period, Model 0—the Black-Scholes constant-volatility model—performs best of all the deterministic volatility function specifications [...] the results again indicate that, the more parsimonious volatility functions provide better hedging performance." The working paper version is more succinct: "simpler is better." 22
- 32. Implied volatility is, by definition, an artifact of the BSM formula. As Professor Seru's Exhibit 1 illustrates, implied volatility is a nonlinear function that is very sensitive to prices for far-from-the-money options. Conversely, small discrepancies in prices produce large variation in implied volatilities for far-from-the-money options.
- 33. An example of this difference is Professor Seru's focuses on implied volatility and deep-out-of-the-money options. Professor Seru asserts "It is important to note that much of the trading volume in Tesla options during the Class Period involved options far out of the money" and notes that "[f]or example, on August 8, \$50 puts were the most traded options expiring in January 2020 in terms of number of contracts."<sup>23</sup> Professor Seru fails to state that on that date, the January 2020 \$50 puts closed at a midpoint quote of \$2.70 and represented only 0.2% of all Tesla options traded on that date in dollar terms.
- 34. Those January 2020 \$50 put options appreciated over the remaining Class Period, reaching their highest closing bid-ask quote of \$3.40-\$3.90 on August 17<sup>th</sup> (after Tesla stock dropped by over \$60.00 per share from August 8<sup>th</sup>). Based on this price appreciation, reasonable option models would confine the counterfactual prices of those put options to a range between \$0.00 and \$1.00. This magnitude is not much larger than the \$0.50 bid-ask spread of those options on August 17. By contrast, January 2020 near-the-money options traded for over \$50.00, and in-the-money options traded for more than \$300.00, with correspondingly larger fluctuations.
  - 35. These numbers illustrate that in dollar terms, it is far more important for a model measuring

<sup>&</sup>lt;sup>22</sup> See Dumas, Bernard and Fleming, Jeff and Whaley, Robert E., "Implied Volatility Functions: Empirical Tests" (March 1996), NBER Working Paper No. w5500, available at SSRN: https://ssrn.com/abstract=7373.

<sup>&</sup>lt;sup>23</sup> See Seru Report, ¶23 & n.26.

the impact on option prices over the Class Period to reliably calibrate measurements for the higher value near-the-money options than for the less valuable out-of-the-money options. In particular, the Heston Report indicated that 85% of the *dollar* volume (not *contract* volume) of Tesla options traded during the Class Period is concentrated near-the-money.<sup>24</sup> The existence of trading volume in cheap out-of-the-money option contracts on one day does not change my opinion that it is more accurate and important to calibrate a model to at-the-money options for the purpose of measuring counterfactual option prices over the entire Class Period.

#### 4.3 Professor Seru Mistakes Model Misspecification with Price Variation within the Bid-Ask Quotes

36. In his Exhibits 5A and 5B, Professor Seru compared changes in option mid quotes with changes in BSM model-based option values.<sup>25</sup> Contrary to his conclusion that "[the] Black-Scholes model cannot accurately price options, that is, it is biased both in levels and in differences"<sup>26</sup>, his calculations of mid-price changes resemble my results as shown in Figure 1 and 2 below.

37. Professor Seru's Exhibits 5A and 5B exaggerate the differences between changes in mid prices and changes in model-based prices. This exaggeration exists because Professor Seru's calculations are sensitive to whether price changes are calculated using bid or ask price quotes. In Figures 1 and 2 below, I replicate Professor Seru's figures and show that the results from my procedure are largely within the bid-ask quotation range.<sup>27</sup>

<sup>&</sup>lt;sup>24</sup> See Heston Report, ¶124.

<sup>&</sup>lt;sup>25</sup> See Seru Report, ¶31.

<sup>&</sup>lt;sup>26</sup> See Seru Report, ¶30.

<sup>&</sup>lt;sup>27</sup> From one day to another, transaction prices move from one bid-ask quote range to another. The blue and yellow line in Figure 1 and 2 reflect the difference caused by this bid-ask quote range.

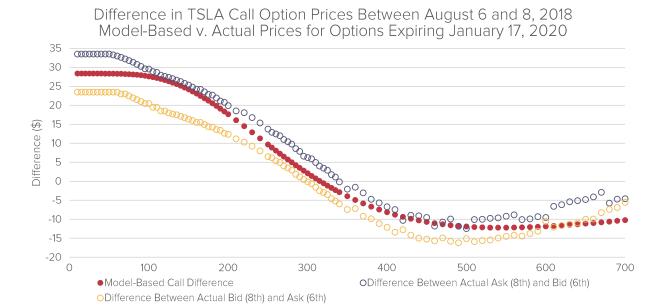


Figure 1

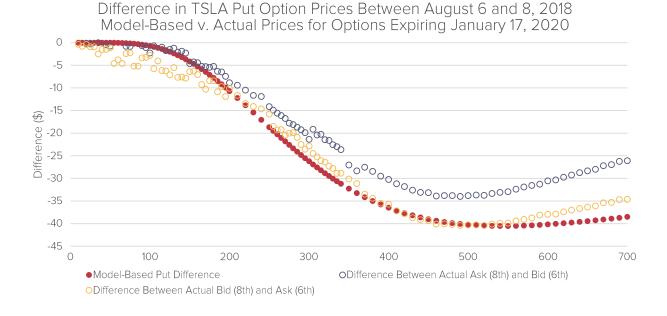


Figure 2

38. Similarly, Figures 3 and 4 below replicate Professor Seru's damages calculation examples in his paragraphs 25 and 26 across all strikes. These charts show that Professor Seru's results are sensitive to the location of actual transaction prices within the bid-ask quotes. In contrast, my impact quantum methodology is largely within the bid-ask bounds of Professor Seru's

calculations.<sup>28</sup>



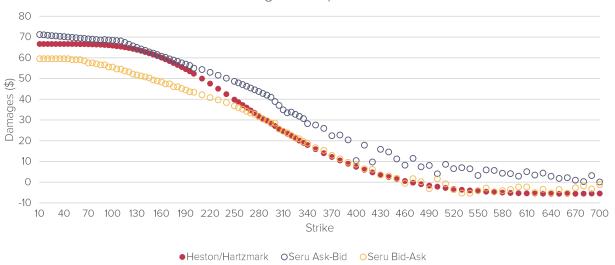


Figure 3

Jan 17 2020 Put Options on Aug 08 - Rebuttal Para. 26 Damages Comparison

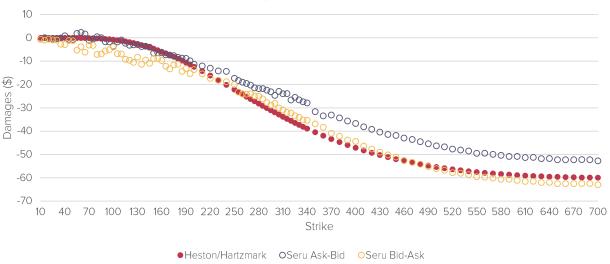


Figure 4

39. Importantly, the Black-Scholes impact quantum methodology also generates smooth

<sup>&</sup>lt;sup>28</sup> Note that the red points are examples presented in the Seru Report. Seru Report, ¶¶25-26.

functions of the strike prices, whereas Professor Seru's methodology displays wiggles due to noise in the price data. This noise results in crooked non-monotonic changes in option prices across strike prices as shown in Figure 3 and 4. The differences between my calculations and Professor Seru's calculations presented in Figure 5 below shows the effect of price noise in Professor Seru's procedure. For example, as shown in Figure 3, Professor Seru's methodology provides remarkably different damages for call options with slightly different strikes around \$400.

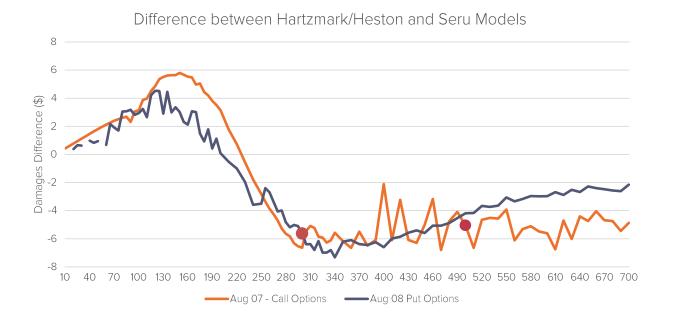


Figure 5

- 40. Figure 5 highlights a key benefit of my methodology as explained in Section 6.3 of the Heston Report. By fitting a smooth impact quantum instead of an absolute price level, my methodology is robust to variations in the bid-ask spread of illiquid out-of-the-money options. Professor Seru's report did not acknowledge the problem of price noise, or engage with the portion of the Heston Report that addressed it.
- 41. By fitting the volatility curve, Professor Seru advocates a novel options methodology, without any empirical evidence or citations to supporting literature. Therefore, it is impossible to evaluate the performance of Professor Seru's methodology. In paragraph 165 of the Heston Report, I cited evidence from Dumas, Fleming, and Whaley (1998) that shows the BSM model predicts price changes better than models with specifications similar to Professor Seru's.

shown that different models produce different numbers. Here and in the Heston Report, I have question of why Professor Seru's numbers are more reasonable than mine, or why mine are is unreasonable or unreliable, or to show his methodology is superior. The Seru Report begs the Seru has presented no citations nor empirical evidence to show the impact quantum methodology reasonable, reliable, and robust for calculating counterfactual option prices. By contrast, Professor supplied empirical analyses and academic citations to show my impact quantum methodology is method might mismeasure harm or assign harm to uninjured parties. Professor Seru has merely qualitatively. To the small extent they differ, Professor Seru concludes that my impact quantum unreasonable As shown herein, Professor Seru's results resemble mine, both quantitatively and

I declare under penalty of perjury that the foregoing is true and correct.

RESPECTFULLY SUBMITTED THIS FIFTH DAY OF MARCH 2022

Steven Neston

Steven L. Heston, Ph.D

### UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF CALIFORNIA

In Re Tesla, Inc. Securities Litigation

Case No. 18-CV-04865 (EMC)

### EXPERT REBUTTAL REPORT OF PROFESSOR AMIT SERU

**DECEMBER 8, 2021** 

**Exhibit** 

370

Heston 3/16/2022 J.W.

#### I. QUALIFICATIONS

- 1. I am the Steven and Roberta Denning Professor of Finance at the Stanford Graduate School of Business, a Senior Fellow at the Hoover Institution and Stanford Institute for Economic Policy Research (SIEPR), a Research Associate at the National Bureau of Economic Research (NBER), and a Research Fellow at the Center for Economic Policy Research (CEPR). Before moving to Stanford, I was a Dennis and Karen Chookaszian Professor at the University of Chicago's Booth School of Business. I was a faculty member at the University of Chicago from 2007 to 2016.
- 2. I hold a Ph.D. in Finance, awarded in 2007 by University of Michigan. In addition, I received my B.E. (Bachelor of Engineering), with concentration in Electronics, from the University of Delhi in 1996 and my MBA from the University of Delhi in 1998.
- 3. I am a co-editor at the Journal of Finance, the official publication of The American Finance Association. The Journal of Finance publishes leading research across all major financial research fields and is one of the most widely cited academic journals in finance and economics. I was also a former editor of both Management Science and the Review of Corporate Finance Studies. I have also served as associate editor of the Journal of Political Economy, Journal of Finance, Management Science, and the Journal of Financial Intermediation. I have received various National Science Foundation (NSF) grants and was named as one of the top 25 Economists under 45 by the International Monetary Fund in 2014. Most recently I received the Alexandre Lamfalussy senior research fellowship from the Bank for International Settlement (BIS) related to my work on intermediation by fintech and big tech firms.

- 4. My primary research interest is in corporate finance, specifically issues related to financial intermediation and regulation, interaction of internal organization of firms with financing and investment, and incentive provision in firms. As detailed in my curriculum vitae, I have authored or co-authored more than 30 published peer-reviewed scholarly articles in top economics and finance journals, including the American Economic Review, the Quarterly Journal of Economics, the Journal of Political Economy, the Review of Economic Studies, the Journal of Finance, the Journal of Financial Economics, and the Review of Financial Studies. I have presented my research to U.S. and international regulatory agencies, including the SEC, the Fed, FDIC, CFPB, FINRA, ECB, and BIS. My research has also been featured in major media, including the Wall Street Journal, the New York Times, the Financial Times, and the Economist.
- 5. I have taught basic and advanced finance and corporate governance courses covering asset pricing and options to MBA students and executives at both Stanford and Chicago for more than a decade. In addition, I have taught several advanced empirical finance research classes to Ph.D. students at both Stanford and Chicago that have covered elements of options and derivatives. As discussed above, my research has touched on several issues in finance and economics, including studies on valuation of asset backed securities, patents that are related to topic of market efficiency, and valuation of option-like payoffs.
- 6. I have previously served as an expert witness in litigation, addressing issues related to market efficiency and damages. A copy of my curriculum vitae, which provides additional details of my professional background, including my publications, is attached as **Appendix A**. A list of my expert witness work as well as deposition testimony is also included in **Appendix A**.

#### II. ASSIGNMENT AND SUMMARY OF CONCLUSIONS

- 7. I have been asked by counsel for the Defendants in the above captioned matter to (1) evaluate Professor Heston's proposed methodology for estimating damages to option holders and (2) evaluate Dr. Hartzmark's analysis of the implied volatility of a particular option portfolio to estimate the inflation as a result of the "direct" effect of Mr. Musk's tweet during the class period.<sup>1</sup>
  - 8. I reached the following conclusions:
  - Professor Heston's methodology for estimating damages to Tesla option holders is fundamentally flawed for the following reasons, each of which makes it unreliable:
    - o The Black-Scholes model is neither reliable nor appropriate when a company is involved in a merger or acquisition deal;
    - o Professor Heston's assumption of put-call parity is not supported by the academic literature and does not hold for Tesla stock during the class period;
    - o Professor Heston's assumption of constant implied volatility across options is speculative, unreliable, inaccurate, and not supported by the academic literature; and
    - o Professor Heston's methodology fails to use actual prices in the actual world to measure damages and consequently fails to reliably estimate the

Expert Report of Steven L. Heston, Ph.D., dated November 8, 2021 ("Heston Report"); Expert Damages Report of Michael L. Hartzmark, Ph.D., dated November 10, 2021 ("Hartzmark Report"). "It is further my understanding that the Class Period: (a) begins on August 7, 2018 at 12:48 p.m. EDT when Mr. Musk tweeted 'Am considering taking Tesla private at \$420. Funding secured.'; and (b) ends on August 17, 2018, after the publication of a New York Times article." Heston Report, ¶9.

difference between actual and but-for prices, and his justification for this assumption is unsubstantiated, speculative, and incorrect as a matter of fact.

- As a consequence of these flaws, Dr. Hartzmark's implementation of Professor Heston's methodology is speculative, unreliable, and inaccurate and would allocate damages to option holders that were not damaged.
- Dr. Hartzmark's use of the January 2020 at-the-money forward straddle<sup>2</sup> to estimate how the probability of deal completion and the "direct" effect of Mr. Musk's tweet changed over the class period is arbitrary and fundamentally flawed for the following reasons:
  - o Dr. Hartzmark's assumption that all movements in implied volatility throughout the class period are due to changes in the "direct" effect of Mr. Musk's tweet is fundamentally flawed; and
  - o Dr. Hartzmark's choice to analyze the implied volatility of the January 2020 at-the-money forward straddle is arbitrary, and his results are not robust against reasonable alternatives.
- 9. I elaborate on and provide the bases for my opinions in Sections IV and V of this report. In performing this work, I have received assistance from Compass Lexecon personnel working under my supervision. Compass Lexecon is being compensated for the time spent by Compass Lexecon personnel at their customary hourly rates. My current hourly rate is \$1,000. My compensation is not contingent on the analyses we conducted or the opinions I offer in this

-4-

Options are "at-the-money when the spot price equals the strike price." At-the-money can be abbreviated as "ATM." A straddle is an option portfolio "when an investor buys both a call and put option of the same underlying asset, each with the same strike price and expiry date." Further, an "ATM forward straddle, as opposed to a simple ATM straddle, means the forward (rather than spot) price equals the strike for both option positions in the straddle." Heston Report, ¶¶21, 73, 80.